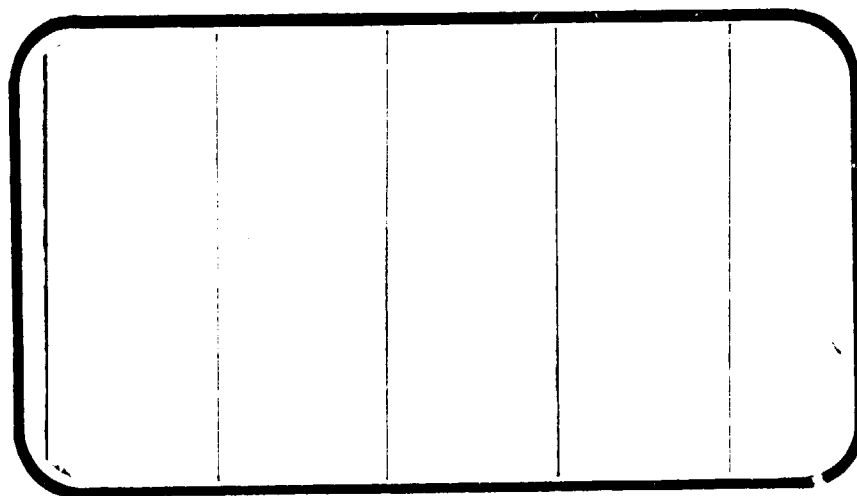


**NASA**

# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR-

141801



(NASA-CR-141801) AERODYNAMIC RESULTS OF A  
SEPARATION EFFECTS TEST CONDUCTED IN THE  
AFEC 40 BY 40 INCH TUNNEL A FACILITY ON THE  
POCKWELL INTERNATIONAL LAUNCH CONFIGURATION  
3 (MODEL 32-OTS) INTEGRATED VEHICLE (IA13),

N75-30240

Unclas  
G3/18 33795

**SPACE SHUTTLE**

**AEROTHERMODYNAMIC DATA REPORT**



**JOHNSON SPACE CENTER**

**HOUSTON, TEXAS**

**DATA Management services**

**SPACE DIVISION**



**CHRYSLER  
CORPORATION**

July, 1975

DMS-DR-2062  
NASA CR-141,801

AERODYNAMIC RESULTS OF A SEPARATION EFFECTS  
TEST CONDUCTED IN THE AEDC 40 x 40 INCH TUNNEL A  
FACILITY ON THE ROCKWELL INTERNATIONAL LAUNCH  
CONFIGURATION 3 (MODEL 32-OTS) INTEGRATED VEHICLE  
(IA13)

Vol. III of III

by

J. H. Campbell, II  
Rockwell International Space Division

Prepared under NASA Contract Number NAS9-13247

by

Data Management Services  
Chrysler Corporation Space Division  
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center  
National Aeronautics and Space Administration  
Houston, Texas

TUNNEL TEST SPECIFICATIONS:

Test Number: AEDC 7A-323  
NASA Series Number: IA13  
Test Dates: July 5-17, 1973

FACILITY COORDINATOR:

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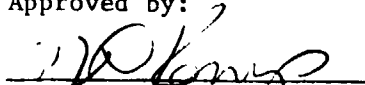
PROJECT ENGINEER:

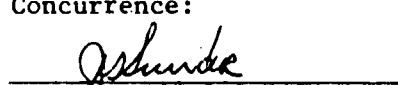
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Chrysler Corporation Space Division assumes no responsibility for the data presented other than display characteristics.

AERODYNAMIC RESULTS OF A SEPARATION EFFECTS  
TEST CONDUCTED IN THE AEDC 40 x 40 INCH TUNNEL A  
FACILITY ON THE ROCKWELL INTERNATIONAL LAUNCH  
CONFIGURATION 3 (MODEL 32-OTS) INTEGRATED VEHICLE  
(IA13)

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J. H. Campbell, II  
Rockwell International Space Division

ABSTRACT

Experimental aerodynamic investigations were conducted from July 5 through July 17, 1973, in the AEDC/VKF tunnel A facility, on a 0.01 scale model (Model 32-OTS) of the Rockwell International launch configuration 3 Integrated Vehicle (excluding the left-hand booster). The AEDC captive trajectory system was utilized in conjunction with the tunnel primary sector to obtain "grid-type" data for tank (ET) abort from the Orbiter (SSV), and for nominal separation of one Booster (SRB) from the Orbiter-Tank combination. Booster separation was investigated with and without separation motors plume simulation. The plumes were generated by eight  $M_j = 2.15$  nozzles using a 1500 psia cold air supply.

Free stream data were obtained for all models (orbiter, tank, orbiter-tank, and right-hand booster) to provide baselines for evaluation of proximity effects.



The entire investigation was conducted at a nominal free stream Mach number of 4.5 and at Reynolds number per foot ranging from approximately  $7.0 \times 10^5$  to  $6.6 \times 10^6$ .

This report is published in three volumes. Volume I contains data figures through page 894. Volume II contains the remaining data figures and the appendix (tabulated source data) is found in Volume III.

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SRB w/Plumes Aerodynamic Characteristics During Separation from Orb/ET	D	1329-1498

Schedule of Coefficients Plotted:

- |    |                                    |    |   |
|----|------------------------------------|----|---|
| A) | CN, CA, CLM, CBL, CY, CYN vs ALPHA | C) | CN, C <sub>A</sub> , CLM, CBL, CY, CYN vs Z |
| B) | CN, CLM, CY, CYN vs ALPHA          | D) | CN, CLM, CY, CYN vs Z                       |

# NOMENCLATURE

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
a		speed of sound; ft/sec
V		velocity; ft/sec
M	MACH	Mach number, $V/a$
$q_{\infty}$	Q(PSF)	dynamic pressure, $\rho V^2/2$ ; psf
$\rho$	RHO	mass density; slugs/ft <sup>3</sup>
$A_b$		base area; ft <sup>2</sup>
$C_{A_b}$	CAB	base force coefficient, $-A_b(P_b - P_{\infty})/q_{\infty}S_w$ ; <u>base force</u> $q_{\infty}S_w$
$C_{A_f}$	CAF	forebody axial force coefficient; $C_A - C_{A_b}$
$C_A$	CA	axial force coefficient excluding adjustments for base and sting/balance cavity pressure measurements; <u>axial force</u> $q_{\infty}S_w$
$C_N$	CN	normal force coefficient; <u>normal force</u> $q_{\infty}S_w$
$C_{\ell}$	CBL	rolling moment coefficient; <u>rolling moment</u> $q_{\infty}S_w l_{ref}$
$C_m$	CLM	pitching moment coefficient; <u>pitching moment</u> $q_{\infty}S_w l_{ref}$
$C_Y$	CY	side force coefficient; <u>side force</u> $q_{\infty}S_w$
$C_n$	CYN	yawing moment coefficient; <u>yawing moment</u> $q_{\infty}S_w l_{ref}$

# NOMENCLATURE (Continued)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
$S_w$	SREF	reference wing area; $ft^2$
CPS		captive trajectory system
$P_{b1}/P_\infty$	PB1/P	number one base pressure ratio
$P_{b2}/P_\infty$	PB2/P	number two base pressure ratio
$P_c/P_\infty$	PC/P	sting/balance cavity pressure ratio
$P_{b1}$	PB1	number one base pressure; psia
$P_{b2}$	PB2	number two base pressure; psia
$P_c$	PC	SRB separation nozzle chamber pressure; psia
$P_\infty$	P	freestream static pressure, psia
$P_{t\infty}$	PTOTAL	freestream total pressure, psia
$C_{p_{b1}}$	CPB1	number one orbiter base pressure coefficient, $(P_{b1} - P_\infty)/q_\infty$
$C_{p_{b2}}$	CPB2	number two orbiter base pressure coefficient, $(P_{b2} - P_\infty)/q_\infty$
$C_{p_c}$	CPC	sting balance cavity pressure coefficient, $(P_c - P_\infty)/q_\infty$
$R/l$	RN/L	freestream unit Reynolds number $\times 10^{-6}$ ; per foot
$l_{ref}$	LREF BREF	reference dimension used to reduce the measured balance moment data to coefficient form, orbiter model body length, inches
$\delta_a$	AILRON	aileron deflection; degrees
$\delta_e$	ELEVTR	elevon deflection; degrees

# NOMENCLATURE (Continued)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
$\delta_r$	RUDDER	rudder deflection; degrees
$\Delta\alpha$	DALPHA	parameter name for nominal angle of attack difference, ( $\Delta\alpha = \alpha_{SRB} - \alpha_{OT}$ ) or ( $\Delta\alpha = \alpha_{ET} - \alpha_0$ ); degrees
$\Delta\beta$	DBETA	parameter name for nominal angle of sideslip difference, ( $\Delta\beta = \beta_{SRB} - \beta_{OT}$ ) or ( $\Delta\beta = \beta_{ET} - \beta_0$ ); degrees
$\alpha_{O/T}$	ALPHA	orbiter tank angle of attack. All source data are presented as a function of $\alpha_{O/T}$ , except for isolated tests and those where the tank is separating from the orbiter; degrees $\alpha_{SRB} = \alpha_{O/T} + \Delta\alpha$
$\alpha_0$	ALPHA	orbiter angle of attack. Source data are presented as a function of $\alpha_0$ for isolated tests and those where the tank is separating from the orbiter; degrees $\alpha_{ET} = \alpha_0 + \Delta\alpha$
$\alpha_{ET}$	ALPHA	external tank angle of attack. Source data are presented as a function of $\alpha_{ET}$ , only, for tests of the isolated external tank, degrees
$\alpha_{SRB}$	ALPHA	solid rocket booster angle of attack, source data are presented as a function of $\alpha_{SRB}$ , only, for tests of the isolated SRB, degrees
$\beta_{O/T}$	BETA	orbiter tank angle of sideslip. All source data are presented as a function of $\beta_{O/T}$ except for isolated tests and those where the tank is separating from the orbiter; degrees $\beta_{SRB} = \beta_{O/T} + \Delta\beta$
$\beta_0$	BETA	orbiter angle of sideslip. Source data are presented as a function of $\beta_0$ for isolated tests and those where the tank is separating from the orbiter; degrees $\beta_{ET} = \beta_0 + \Delta\beta$



# NOMENCLATURE (Concluded)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
$\beta_{ET}$	BETA	external tank angle of sideslip. Source data are presented as a function of $\beta_{ET}$ , only, for tests of the isolated external tank, degrees
$\beta_{SRB}$	BETA	solid rocket booster angle of sideslip. Source data are presented as a function of $\beta_{SRB}$ , only, for tests of the isolated SRB, degrees
$\delta_{SB}$	SPDBRK	speed brake flare angle, degrees
c.g.		center of gravity
$T_{t\infty}$	TTOTL	freestream total temperature; °R
$T_{\infty}$	T	freestream static temperature; °R
$\Delta X$	X	separation distance measured along the longitudinal, X axis; inches. See figures 2d and 2e
	YMRP	X station of the moment reference center; inches. See figures 2b and 2c
$\Delta Y$	Y	separation distance measured along the lateral, Y axis; inches. See figures 2d and 2e.
	YMRP	Y station of the moment reference center; inches. See figures 2b and 2c.
	ZMRP	Z station of the moment reference center; inches. See figures 2b and 2c.
$\Delta Z$	Z	separation distance measured along the vertical Z axis; inches. See figures 2d and 2e.

## INTRODUCTION

The NASA Space Shuttle Integrated Vehicle (SSV) is comprised of four components: an orbiter (O), an external fuel tank (ET) for the orbiter, and two solid rocket boosters (SRB's). During the ascent phase of the SSV the ET and SRB's are separated from the orbiter, and return to earth. In order to assure clean separation of the ET and the SRB's from the orbiter it is necessary to know the aerodynamic forces acting on these components, and the orbiter, during the separation procedure. This test was conducted to determine the interacting aerodynamic effects for two situations: 1) nominal abort of the SRB from the orbiter/external tank combination and 2) emergency abort of the external tank from the orbiter.

Data were obtained at a freestream Mach number of 4.5 with Reynolds number varying from  $7.0 \times 10^5$  to  $6.6 \times 10^6$  per foot. The SRB has small rocket motors which are utilized to assure positive separation. During these tests motor operation was simulated by using cold air jets and data were recorded with and without these motor plume simulations.

The isolated vehicle components were tested over an angle of attack and sideslip range as shown below:

<u>Vehicle Component</u>	<u><math>\alpha</math> Range</u>	<u><math>\beta</math> Values</u>
Orbiter	-10° to 30°	0°, 5°, 10°
External Tank	-40° to 10°	0°, 5°
Orbiter/External Tank	-10° to 30°	0°, 5°
Solid Rocket Booster	-30° to 15°	-10°, 0°, 5°, 10°, 20°, 30°

## INTRODUCTION (Continued)

In order to examine the interacting flow field effects during the two abort situations, the separating component was held at attitudes relative to the parent configuration and moved to various field positions to record aerodynamic data. The relative attitudes tested were:

<u>Vehicle Component</u>	<u><math>\Delta\alpha</math> Range</u>	<u><math>\Delta\beta</math> Values</u>
External Tank	-30° to 5°	0°, $\pm 5^\circ$
Solid Rocket Booster	-20° to 5°	0°, $\pm 5^\circ$ , -10°, -20°

where for external tank  $\Delta\alpha = (\alpha_{ET} - \alpha_0)$ ,  $\Delta\beta = (\beta_{ET} - \beta_0)$  and for solid rocket booster  $\Delta\alpha = (\alpha_{SRB} - \alpha_{0/ET})$ ,  $\Delta\beta = (\beta_{SRB} - \beta_{0/ET})$ .

The vertical (Z), longitudinal (X) and lateral (Y) separation distance ranges were:

<u>Vehicle Component</u>	<u>X-Inches(f.s.)</u>	<u>Y-Inches(f.s.)</u>	<u>Z-Inches(f.s.)</u>
External Tank	0 to 1200	-200 to 200	0 to 1300
Solid Rocket Booster	0 to 1600	0 to 800	0 to 100

where for the external tank, X, Y, and Z = 0 when the ET nose is in the mated position with respect to the orbiter. (See figure 2d.) For the SRB, X, Y, and Z = 0 when the SRB nose is in the mated position with respect to the Orbiter/External Tank. (See figure 2e.)

During SRB separation testing (see figure 2e.) the external tank was rigidly attached to the orbiter, which was supported inverted on the tunnel primary sector. The booster was supported on the CTS via a flow-through balance and sting.

During external tank separation testing (see figure 2d.), the

# INTRODUCTION (Concluded)

orbiter was supported inverted on the primary sector and the ET was supported on the CTS.

No base or cavity pressure taps were built into the models. To obtain these pressures (two base, one cavity per model), hardline tubing was routed to the vicinity of the model bases and bent into areas where pressures were desired.

As an aid in clarifying the interdependence of the test configuration with the tabulated source data in the Appendix, the following array is a necessary adjunct to the Run Summary Schedule of Table II.

<u>DATASET</u>	<u>BALANCE</u>	<u>TEST CONFIGURATION</u>	<u>APPENDIX PAGE NUMBER</u>
RTJ001 through RTJ099	Orbiter	} Tank Separating From Orbiter	1
RTJT01 through RTJT99	Tank		89
			90
			178
RTJ100 through RTJ283	Orbiter Tank	} SRB Separating From Orbiter Tank	179
RTJ300 through RTJ483	SRB		361
			362
			543
RTJ500 RTJ501	Tank	} Isolated	543
RTJ502 through RTJ507	Orbiter		544
			545
RTJ508 RTJ509	Orbiter Tank		550
			551
RTJ510 through RTJ536	SRB		552
			553
			565

### CONFIGURATIONS INVESTIGATED

The 0.01-scale 32-OTS models consists of an orbiter, tank, and one booster (with metric high-pressure separation thrusters, fore and aft). See figures 2b and 2c.

The configuration of each vehicle component tested is given below. Pertinent dimensional data for these model components may be found in Table III.

Orbiter 09 = (B<sub>19</sub>C<sub>7</sub>F<sub>5</sub>M<sub>4</sub>) (W<sub>107</sub>E<sub>23</sub>) (V<sub>7</sub>R<sub>5</sub>) where:

<u>Component</u>	<u>Definition</u>
B <sub>19</sub>	Fuselage per Rockwell line VL70-000139B. (Model drawing SS-A00062)
C <sub>7</sub>	Canopy per Rockwell Lines VL70-000139B. (Model drawing SS-A00062)
E <sub>23</sub>	Elevons per Rockwell lines VL70-000139B. (Model drawing SS-A00109)
F <sub>5</sub>	Body flap per Rockwell lines VL70-000139B. (Model drawing SS-A00062)
M <sub>4</sub>	Orbital Maneuvering System per Rockwell lines VL70-000139B. (Model drawing SS-A00062)
R <sub>5</sub>	Rudder per Rockwell lines VL70-000139B and VL70-000095. (Model drawing SS-A00062)
V <sub>7</sub>	Vertical tail per Rockwell lines VL70-000139B and VL70-000095. (Model drawing SS-A00062)
W <sub>107</sub>	Wing per Rockwell lines VL70-000130B. (Model drawing SS-A00109)

The external tank (T<sub>10</sub>) is not broken down into subassemblies and was constructed to Rockwell lines VL72-000088 and VL78-000041 (Model Drawing SS-A-00108).

CONFIGURATIONS INVESTIGATED  
(Concluded)

The solid rocket booster (Sg) is not broken down into subassemblies and was constructed to Rockwell lines VL72-000088 and VL77-000036 (Model Drawing SS-A-00113).

## TEST FACILITY DESCRIPTION

The AEDC von Karman Facility (VKF) Tunnel A is a continuous, closed-circuit, variable density wind tunnel with an automatically driven flexible-plate-type nozzle and a 40- by 40-in. test section (see Figure 3). The tunnel can be operated at Mach numbers from 1.5 to 6 at maximum stagnation pressures from 29 to 200 psia, respectively, and stagnation temperatures up to  $750^{\circ}\text{R}$  ( $M = 6$ ). Minimum operating pressures range from about one-tenth to one-twentieth of the maximum at each Mach number. A description of the tunnel and airflow calibration information may be found in the Test Facilities Handbook\*.

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\*Test Facilities Handbook (Ninth Edition). "von Karman Gas Dynamics Facility, Vol. 3", Arnold Engineering Development Center, July 1971.

## DATA REDUCTION

Six-component aerodynamic force and moment data were recorded for the Orbiter, External Tank, and Orbiter/ET. Four-component force and moment data were recorded for the SRB. Thrust loads generated by the SRB separation motors were treated as tares and were subtracted from balance recorded loads before computing coefficients. For Orbiter freestream and ET abort testing, the Orbiter was mounted on the AEDC 0.85-inch 4.00-Y-36-037 balance. For ET freestream and ET abort, the ET was mounted on the AEDC 0.85-inch 4.00-H-36-049 balance. For SRB separation, the Orbiter/ET was mounted on the 4.00-Y-36-049 balance. For SRB freestream and separation, the SRB was mounted on the Rockwell 0.625-inch 4.00-H-34-065 flow-through balance.

All force and moment data were reduced to coefficient form in the body axis system. Base and balance cavity pressures were recorded. However, no pressure adjustments were made to the force and moment data. All coefficients are based on the following reference dimensions.

$$S_{REF} = \text{orbiter wing reference area} = 0.269 \text{ ft}^2$$

$$l_{REF} = b_{REF} = \text{orbiter body length} = 12.903 \text{ inches}$$

Moments are about the following reference c.g. locations:

Orbiter (Isolated and with ET separating):

$$XMRP = 8.516 \text{ inches aft of orbiter nose (see figure 2c)}$$

$$ZMRP = 4.0 \text{ (fuselage reference line 4.0)}$$

External Tank (Isolated and while separating from orbiter):

$$XMRP = 10.94 \text{ inches aft of ET nose (see figure 2c)}$$

$$ZMRP = 0.0 \text{ (tank centerline)}$$



Orbiter/ET (Isolated and with SRB separating)

XMRP = 7.43 inches aft of ET nose

(see figure 2b)

ZMRP = 0.47 inches above ET centerline

SRB (Isolated and while separating from Orbiter/ET)

XMRP = 9.67 inches aft of SRB nose (see figure 2b )

ZMRP = 0.0 (SRB centerline)



# EXTERNAL TANK SEPARATION DATA

TABLE II.

TEST: JA13

DATA SET / RUN NUMBER COLLATION SUMMARY

DATE: POST-TEST

DATA SET IDENTIFIER		CONFIGURATION	SCHD.		PARAMETERS/VALUES										NO. OF RUNS	X — MACH NUMBERS						
			α	β	ΔX	ΔB	Y	Z	MACH	PT	DEL	DER	RF	0		400	800	1200				
RTJ001		09/T10	0	0	5	0	0	A	4.53	110	0	0	0	1	2	3	4					
002					0			B						5	6	7	8					
003							200	B						12	11	10	9					
004						5		B						13	14	15	16					
005							0	B						20	19	18	17					
006					-5	0		C						21	22	23	24					
007					-10			D						25	26	27	28					
008							200	D						32	31	30	29					
009						5		D						33	34	35	36					
010							0	D						40	39	38	37					
011					-20	0		E						41	42	43	44					
012							200	E						48	47	46	45					
013						5		E						49	50	51	52					
014							0	E						56	55	54	53					
015					-30	0		1300						57	58	59	60					
016					5			A						61	62	63	64					
017					0			F						65	66	67	—					
018								F						68	69	70	71					

1	7	13	19	25	31	37	43	49	55	61	67	73	76
CN	ICLM	CY	CYN	ICBL	CA								
COEFFICIENTS													
A) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
B) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
C) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
D) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
E) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
F) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
G) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
H) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
I) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
J) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
K) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
L) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
M) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
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O) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
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R) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
S) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
T) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
U) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
V) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
W) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
X) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
Y) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													
Z) = 0, 100, 200, 300, 400, 600, 800, 1000, 1300													

α, β, Δα, Δβ - DEGREES ; X, Y - INCHES (FULL SCALE) ; DEL, DER - DEGREES ; PT - PSIA ; RF - DEGREES (RUDDER FLARE)

\* O DATA - ORBITER DATA, T DATA - EXTERNAL TANK DATA

TABLE II. (Continued)

TEST: IAI3

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHED.		PARAMETERS/VALUES								NO. OF RUNS	MAGN. NUMBERS				
		A	B	D <sub>α</sub>	D <sub>β</sub>	Y	Z	MM	PT	DEL	DER		RF	0	400	800	1200
RTJ 019	0 <sub>9</sub> /T <sub>10</sub>	-5	0	0	0	200	F	4.53	110	0	0	0	75	74	73	72	
020						↓	F						76	77	78	79	
021						↓	F						83	82	81	80	
022				-5	0	↓	C						84	85	86	87	
023				-10	↓	↓	D						88	89	90	91	
024					↓	200	D						95	94	93	92	
025					5	↓	D						96	97	98	99	
026				↓	↓	0	D						103	102	101	100	
027				-20	0	↓	E						104	105	106	107	
028					↓	200	E						111	110	109	108	
029					5	↓	E						112	113	114	115	
030				↓	↓	0	E						119	118	117	116	
031		↓		-30	↓	↓	1300	↓	↓				120	121	122	123	
032		-10		5	0	↓	A	4.52	80				124	125	126	127	
033				0	↓	↓	B						128	129	130	131	
034					↓	200	B						135	134	133	132	
035						5	↓						136	137	138	139	
↑ 036	↑	↑	↑	↑	↑	↓	B	↑	↑	↑	↑		143	142	141	140	

17131925313743495561677576

CAKLMENGYNGYNGBLGA

~~S~~SCHEDULES

↑

A) = 0, 100, 200, 300, 400, 600 INCHES (FULL SCALE)

B) = 0, 100, 200, 300, 400, 600, 800, 1000

C) = 200, 300, 400, 600, 800, 1000, 1300

D) = 300, 400, 600, 800, 1000, 1300

IDVAR (1)

IDVAR (2)

NDV

6

↑

$\alpha, \beta, \delta, \delta\beta$  - DEGREES ; X, Y - INCHES (FULLSCALE) ; DEL, DER - DEGREES ; PT - PSIA ; RF - DEGREES (RUDDER FLARE)



# EXTERNAL TANK SEPARATION DATA

TABLE II. (Continued)

TEST: IA-13		DATA SET/RUN NUMBER COLLATION SUMMARY										DATE: Aug-78 ST				
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES								NO. OF RUNS	TEST RUN NUMBERS			
		$\alpha$	$\beta$	$P_A$	$D_P$	$Y$	$Z$	$M_{00}$	$P_T$	$\Delta L$	$D^* R$		$X$	$M_{00}$	$200$	$1200$
RTJ052	$\phi_9/T_{10}$	0	0	0	0	0	-200	B	4.53	110	10	-10	197			
053		0	0	0	0	0	0	B					197			
054		0	0	0	0	0	200	B					200			
055		0	0	0	-5	-200	B						201			
056		0	0	0	5	0	B						202			
057		0	0	0	5	200	B						203			
058		0	0	-10	0	-200	D						204			
059		0	0	0	0	0	D						205			
060		0	0	0	0	200	D						206			
061		0	0	-5	-200	D							207			
062		0	0	5	0	D							208			
063		0	0	5	200	D							209			
064		0	0	-20	0	-200	E						210			
065		0	0	0	0	E							211			
066		0	0	0	200	E							212			
067		0	0	-5	-200	E							213			
068		0	0	5	0	E							214			
069		0	0	5	200	E							215			

TABLE II. (Continued)

EXTERNAL TANK SEPARATION DATA

DATE: POST-TEST

DATA SET/RUN NUMBER COLLATION SUMMARY

TEST: IA 13

DATA SET IDENTIFIER		CONFIGURATION	SCHD.		PARAMETERS/VALUES										NO. OF RUNS	MACH NUMBERS					TEST RUN NUMBERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
			α	β	Dα	Dβ	Y	Z	MACH	PT	DEL	DER	RF	0		400	800	1200																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
RTJ 070		09/T10	-5	0	0	0	-200	F	4.52	80	+10	-10	0					216																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

CM, CFM, CY, CYN, CBL, CBA, COEFFICIENTS  
 D) = 300, 400, 600, 800, 1000, 1300 INCHES (FULL SCALE)  
 E) = 600, 800, 1000, 1300  
 SCHEDULES  
 X, β, Dα, Dβ - DEGREES ; X, Y - INCHES (FULL SCALE) ; DEL, DER - DEGREES ; PT - PTIA ; RF - DEGREES (RUDDER FLARE)

## EXTERNAL TANK SEPARATION DATA

TABLE II. (Continued)

TEST: IAI3

## DATA SET/RUN NUMBER COLLOCATION SUMMARY

DATE: POST-TEST

DATA SET IDENTIFIER		CONFIGURATION	SCHD.		PARAMETERS/VALUES								NO. OF RUNS	X — MACH NUMBERS				
			$\alpha$	$\beta$	DB	Y	Z	MRH	PT	DEL	DER	RF		0	400	800	1200	
RTJ 088		09/T10	0	0	0	0	B	4.53	110	+10	+10	0		234	235	236	237	
089					-10		D							238	239	240	241	
090					-20	1	E							242	243	244	245	
091					0	200	B							246	247	248	249	
092					-10		D							250	251	252	253	
093					-20		E			V	V			254	255	256	257	
094					0		B			-40	-40			258	259	260	261	
095					-10		D							262	263	264	265	
096					-20	1	E							266	267	268	269	
097					0	0	B							270	271	272	273	
098					-10		D							274	275	276	277	
099	V	V	V	V	-20	V	E	V	V	V	V	V		278	279	280	281	

1	7	13	19	25	31	37	43	49	55	61	67	75	76	8
CM	CLM	CLY	KYM	KBL	CA									
COEFFICIENTS														
D = 0, 100, 200, 300, 400, 600, 800, 1000 INCHES (RULERS)														
EJ = 600, 800, 1000, 1300														
Z SCHEDULES														
a OR B														
D = 300, 400, 600, 800, 1000, 1300														
IOVAR (1) IOVAR (2) NDV														
Z														

$\alpha, \beta, \delta, \delta\alpha, \delta\beta$  - DEGREES ;  $X, Y$  - INCHES (FULL SCALE) ;  $\Delta E_L, \Delta E_R$  - DEGREES ;  $PT - PSIA$  ;  $RF$  - DEGREES (RUDDER FLARE)



# Booster (SRB) Separation

TABLE II. (Continued)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: POST-TEST

TEST: 1A13

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES										NO. OF RUNS	X—MACH NUMBERS						TEST RUN NUMBERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		α	β	Δ	DB	Y	Z	MKH	PT	PCH	RF	X—MACH NUMBERS						TEST RUN NUMBERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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RTJ 100	O <sub>9</sub> T <sub>10</sub> /S <sub>8</sub>	0	0	0	0	0	A	4.48	11.6	1500	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

1 7 13 19 25 31 37 43 49 55 61 67 75 76

COEFFICIENTS  
A) = 0, 50, 100, 150, 200, 300, 400, 600, 800, 1000 INCHES (FAIL SCALE)

RTJ100 THROUGH RTJ283 - ORBITER/TANK DATA  
RTJ300 THROUGH RTJ483 - SRB DATA

# BOOSTER (SRB) SEPARATION

TABLE II. (Continued)

TEST: 1A 13		DATA SET/RUN NUMBER COLLATION SUMMARY										DATE: POST-TEST					
DATA SET IDENTIFIER	CONFIGURATION	PARAMETERS/VALUES										NO. OF RUNS	MACH NUMBERS				
		SCHD.		MACH		PT		PCH		RF			MACH NUMBERS				
		a	B	DX	DB	Y	Z	MACH	PT	PCH	RF		0	300	600	900	
RTJ 118	09Tio/58 (PLUMES ON)	0	0	0	0	400	A	4.53	110	1500	0		369	370	371	372	
119	↓					800	800			↓			373	374	375	376	
120	(PLUMES OFF)					0	A			—			377	378	379	380	
121						200	A						384	383	382	381	
122						400	A						385	386	387	388	
123						800	800						389	390	391	392	
124						↓	↓						—	—	—	—	
125				↓		400	A						—	—	—	—	
126				5		0	B						395	—	—	398	
127						200	B						396	—	—	399	
128				↓		400	B						397	—	—	400	
129				-5		0	A,C*						411*	409	401	402	
130						200	A,C*						412*	403	404	405	
131						400	A						410	408	407	406	
132				↓		800	800						413	414	415	416	
133				-10		↓	↓						417	418	419	420	
134						400	A						421	422	423	424	
135	↓			↓		0	D,E,F**						425	427*	429*	432	
													X				
													75 76				
													67				
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TEST RUN NUMBERS  
X=1600  
393  
394

SCHEDULES		COEFFICIENTS										IOVAR (1)		IOVAR (2)		NOV	
		7	13	19	25	31	37	43	49	55	61	67	73	79	85	91	97
A) = 0.50, 100, 150, 200, 300, 400, 600, 800, 1000 INCHES (ALL SCALE)																	
B) = 0.50, 100, 150, 200, 300, 400, 600, 800, 1000 INCHES (ALL SCALE)																	
C) = 0.50, 100, 150, 200, 300, 400, 600, 800, 1000 INCHES (ALL SCALE)																	
D) = 0.50, 100, 150, 200, 300, 400, 600, 800, 1000 INCHES (ALL SCALE)																	
E) = 0.50, 100, 150, 200, 300, 400, 600, 800, 1000 INCHES (ALL SCALE)																	

## Booster (SRB) Separation

TABLE II. (Continued)

TEST: IA/3

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: POST-TEST

TEST RUN NUMBERS																		
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES										NO. OF RUNS	MACH NUMBERS			
		a	b	Dx	DA	Y	Z	MACH	PT	RCH	RF	0	300		600	900		
RTJ 136	O <sub>9</sub> T <sub>10</sub> /S <sub>8</sub>	0	0	-10	0	200	D <sub>9</sub> E <sub>1</sub>	C <sub>1</sub> A <sub>1</sub>	4.53	110	-	0	426	428*	430*	431*		
137	(RUNS OFF)			-20		0	G						433	434	435	436		
138						200	G						440	439	438	437		
139						400	G						441	442	443	444		
140						800	800						445	446	447	448		
141				0	5	0	A						449	-	-	452		
142						200	A						450	-	-	453		
143						400	A						451			454		
144						200	A						455	456	457	458		
145						400	A						462	461	460	459		
146						0	H						463	464	465	466		
147						800	800						467	468	469	470		
148						0	H						471	472	473	474		
149						200	D <sub>1</sub> A <sub>1</sub>						475	477*	478*	479*		
150						400	A						476	482	481	480		
151						800	800						483	484	485	486		
152													487	488	489	490		
153						400	A <sub>1</sub> I <sub>1</sub>						494*	491	492	493		

1	7	13	19	25	31	37	43	49	55	61	67	75	76
5. N	15. M	15. Y	15. X. M.	15. B. L.	15. A.								
<p align="center">COEFFICIENTS</p> <p align="center">(C. A. R. 11) 11 46 12 41</p> <p>A) = 0, 50, 100, 150, 200, 300, 400, 600, 800, 1000</p> <p>B) = 200, 300, 400, 600, 800, 1000</p> <p>C) = 50, 100, 150, 200, 300, 400, 600, 800, 1000</p> <p>D) = 100, 150, 200, 300, 400, 600, 800, 1000</p>													
<p><del>2</del> SCHEDULES</p>													

c) 50, 100, 150, 200, 300, 400, 600, 800, 1000

COEFFICIENTS

A) = 0, 50, 100, 150, 200, 300, 400, 600  
D) = 200, 300, 400, 600, 800, 1000  
G) = 600, 800, 1000  
I) = 300, 400, 600, 800, 1000

$$H) = 400, 600, 800, 1000$$

# ROCKET (SRB) SEPARATION

TABLE II. (Continued)

TEST: 1A13

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: POST-TEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES										NO. OF RUNS	X—MACH-NUMBERS					TEST RUN NUMBERS									
		$\alpha$	$\beta$	$\Delta x$	$\Delta y$	$\Delta z$	MACH	PT	PLH	RF	O	300	600		900	0	300	600	900										
RTJ 154	09 T10/58	0	0	0	0	-20					4.53	110	-	0	495	496	499	500											
155	(PLUMES OFF)	↓	↓	↓	200	H, A*					↓	↓	↓		498	497	502*	501*											
158	( PLUMES ON)	↓	↓	5	0	0	B				4.51	28.9	1500		511	-	-	514											
159		↓	↓	↓	200	B									512	-	-	515											
160		↓	↓	↓	400	B									513	-	-	516											
161		↓	↓	-5	0	C, A*									527	525*	517	518											
162		↓	↓	↓	200	A, C*									528*	519	520	521											
163		↓	↓	↓	400	A									526	524	523	522											
164		↓	↓	↓	800	800									529	530	531	532											
165		↓	↓	-10	↓	↓									533	534	535	536											
166		↓	↓	↓	400	A									537	538	539	540											
167		↓	↓	↓	0	D, E, F**									541	543*	545*	548*											
168		↓	↓	↓	200	D, E, C, A**									542	544*	546*	547*											
169		↓	↓	-20	0	G									549	550	551	552											
170		↓	↓	↓	200	G									556	555	554	553											
171		↓	↓	↓	400	G									557	558	559	560											
172		↓	↓	↓	800	800									561	562	563	564											

DATA SET IDENTIFIER	CONFIGURATION	SCHD.	PARAMETERS/VALUES	NO. OF RUNS	X MACH-NUMBERS	TEST RUN NUMBERS
154	09 T10/58	0	0	0	495	496
155	(PLUMES OFF)	0	0	0	498	497
158	(PLUMES ON)	0	0	5	511	-
159		0	0	0	512	-
160		0	0	0	513	-
161		0	0	-5	527	525
162		0	0	0	528	519
163		0	0	0	526	524
164		0	0	0	529	530
165		0	0	-10	533	534
166		0	0	0	537	538
167		0	0	0	541	543
168		0	0	0	542	544
169		0	0	-20	549	550
170		0	0	0	556	555
171		0	0	0	557	558
172		0	0	0	561	562

COEFFICIENTS  
 A) = 0.50, 100, 150, 200, 300, 400, 600, 800, 1000  
 B) = 0.50, 100, 150, 200, 300, 400, 600, 800, 1000  
 C) = 50, 100, 150, 200, 300, 400, 600, 800, 1000  
 D) = 100, 150, 200, 300, 400, 600, 800, 1000  
 E) = 100, 150, 200, 300, 400, 600, 800, 1000  
 F) = 150, 200, 300, 400, 600, 800, 1000  
 G) = 400, 600, 800, 1000

# BOOSTER (SRB) SEPARATION

TABLE II. (Continued)

TEST: JA 13

## DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: POST-TEST

DATA SET IDENTIFIER		CONFIGURATION	SCMD.		PARAMETERS/VALUES								NO. OF RUNS	X MACH NUMBERS				TEST RUN NUMBERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
			α	β	DX	DA	Y	Z	MACH	PT	PCH	RF		0	300	600	900																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
RTJ 173		Optio/Sr	0	0	5	5	0	B		453	110	-	0			565	-	-	900																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										</

DATA SET IDENTIFIER	CONFIGURATION	PARAMETERS/VALUES										NO. OF RUNS	X MACH NUMBERS				TEST RUN NUMBERS											
		$\alpha$	$\beta$	DX	DA	Y	Z	NACH	PT	PCH	RF					0	300	600	900									
GA 151A	151A																											
GA 152A	152A																											
GA 153A	153A																											
GA 154A	154A																											
GA 155A	155A																											
GA 156A	156A																											
GA 157A	157A																											
GA 158A	158A																											
GA 159A	159A																											
GA 160A	160A																											
GA 161A	161A																											
GA 162A	162A																											
GA 163A	163A																											
GA 164A	164A																											
GA 165A	165A																											
GA 166A	166A																											
GA 167A	167A																											
GA 168A	168A																											
GA 169A	169A																											
GA 170A	170A																											

COEFFICIENTS

A) = 0, 50, 100, 150, 200, 300, 400, 600, 800, 1000 INCHES (FULLSCALE)

B) = 0, 50, 100, 150, 200, 300, 400, 600, 800, 1000

C) = 50, 100, 150, 200, 300, 400, 600, 800, 1000

D) = 400, 600, 800, 1000

E) = 200, 300, 400, 600

F) = 400, 600

G) = 300, 400, 600

# BOOSTER (SRB) SEPARATION

TABLE II. (Continued)

TEST : JIA13										DATE : POST-TEST									
DATA SET / RUN NUMBER COLLATION SUMMARY										TEST RUN NUMBERS									
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES								NO. OF RUNS	X - MACH NUMBERS						
		α	β	ΔX	ΔP	Y	Z	MACH	PT	PCH	RF		0	300	600	900			
RTJ 191	09 T10 / S8	0	0	-5	-5	200	C, A*	4.53	110	-	0		601	602	605*	900			
192	(PLUMES OFF)					400	A						603	604	608	607			
193						800	800						609	610	611	612			
194						-10							613	614	615	616			
195							400 A, C*						620*	617	618	619			
196							200 I, C*, E**						621	622*	623*	624*			
197							O H						625	626	627	628			
198						-20	H						629	630	631	638			
199							200 H, I, E**						632	631	636*	639*			
200							400 H, C*, E**						633	634*	635*	640*			
201							800 800						641	642	643	644			
202						-10	O D, A*						645	-	-	648			
203							200 D, A*						646	-	-	649*			
204							400 A						647	-	-	650			
205						-5	O G, #*						651	652	653*	654			
206							200 A, C, D, E**						662	659*	658*	655*			
207							400 A, E*, F**						661	660*	657	656			
208							800 800						663	664	665	666			

1	7	13	19	25	31	37	43	49	55	61	67	75	76
GM	15A	15Y	15YN	16A	16A	GA				X	1Z		6

TEST SCHEDULES

A) = 01, 5, 10, 150, 200, 300, 400, 600, 800, 1000 INCHES (INUSINCH)

B) = 200, 300, 400, 600, 800, 1000

COEFFICIENTS

C) = 50, 100, 150, 200, 300, 400, 600, 800, 1000

D) = 100, 150, 200, 300, 400, 600, 800, 1000

COEFFICIENTS  
 A) = 0.5, 100, 150, 200, 300, 400, 600, 800, 1000 INCHES (PLUMES) C) = 50, 100, 150, 200, 300, 400, 600, 800, 1000  
 D) = 200, 300, 400, 600, 800, 1000  
 E) = 150, 200, 300, 400, 600, 800, 1000  
 F) = 300, 400, 600, 800, 1000

TABLE II. (Continued)

TEST: IA13

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: PASTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES							NO. OF RUNS	X-MACH-NUMBERS				
		$\alpha$	$\beta$	Dx	Dy	Z	MACH	PT	PCH	RF		0	300	600	900	
RTJ 209	09 Tio/Sg	0	0	-10	-10	800		4.53	110	-	0		667	668	669	670
210	(PLUMES OFF)					400 A, D, E, I							680	677	676	671
211						200 D, H, I							679	678	672	673
212						0 I, G, H							681	682	675	674
213					-20	H, G							689	690	683	684
214						200 D, G, H							692	691	688	685
215						400 D, G, H							694	693	687	686
216						800							695	696	697	698
217				-20	5	0 G							699	-	-	702
218						200 G							700	-	-	703
219						400 G							701	-	-	704
220					-5	0 G, M							714	713	705	706
221						200 G, M							715	711	708	707
222						400 G							716	712	709	710
223						800							717	718	719	720
224					-10								721	722	723	724
225						0 G, M							734	733	725	726
226						200 G							735	731	728	727

19	26	31	37	43	49	55	61	€7
75	76							

[illegible]

1

**Z** SCHEDULES

A) = 0.50, 100, 170, 200, 300, 400, 800, 1000, 10000, 100000, 1000000  
D) = 200, 300, 400, 600, 800, 1000

$$G = 100, 150, 200, 300, 400, 600, 800, 1000$$
$$44) = 400, 600, 800, 1000$$
$$f = 600,800,1000$$
$$N = 800, 1000$$
$$I = 300,400,600,800,1000$$
$$K_j = 800, 1000$$

Booster (SRB) Separation

TABLE II. (Continued)

TEST: IA 13

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: POSTTEST

DATA SET IDENTIFIER		CONFIGURATION	SCHD.		PARAMETERS/VALUES										NO. OF RUNS	MACH NUMBERS						TEST RUN NUMBERS
			$\alpha$	$\beta$	$D_{\alpha}$	$D_{\beta}$	$Y$	$Z$	$MACH$	$PT$	$PC$	$RF$	0	300		600	900					
RTJ 227		09 T10/S8	0	0	-20	-10	400	$6.5 \times 10^3$	4.53	110	-	0	736	732	729	730						
228		(PLUMES OFF)				-20	0	M					737	738	743	744						
229							200	M					740	729	746	745						
230							400	M					741	742	747	748						
231							800	800					749	750	751	752						

7 13 19 25 31 37 43 49 55 61 67 75 76

CH 1000

COEFFICIENTS

$\alpha$  OR  $\beta$   
SCHEDULES



TABLE II. (Continued)

POSTER (SRB) SEPARATION

TEST: 1A/13

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: POST-TEST

DATA SET IDENTIFIER		CONFIGURATION	SCHD.		PARAMETERS/VALUES										NO. OF RUNS	Y—MACH NUMBERS					
			$\alpha$	$\beta$	$D\alpha$	$D\beta$	$\gamma$	$\delta$	$\epsilon$	MACH	PT	PCH	RF	0		200	400	800			
RTJ 232		09 T10/S8	0	5	5	5	0	B			4.51	28.9	1500	0	853	854	855				
233		(RUNS ON)				0		B							858	857	856				
234						-5		J,B*							899	902*	903*				
235						-10		J,B*							900	925*	924*				
236						-20		J							901	942	943				
237						0	5	A							859	860	861				
238							0	A, 800*							864	863	862	883*			
239						-5		H, A*, 800**							906	904*	905*	890*			
240						-10		H, D*, A*, 800**							909	926*	927*	891*			
241						-20		H, I*, 800**							910	941*	940*	898			
242						-5	5	C, A*							865	866	869*				
243							0	C, A*, 800*							868	867	872*	884*			
244						-5		H, C*, A*, 800**							907	912*	913*	889*			
245						-10		H, C*, 800*							908	929*	928*	892*			
246						-20		H, 800*							911	938*	939*	897*			
247						-10	5	D, A*							873	874	870*				
248							0	D, A*, 800**							876	875	871*	885*			
249						-5		G, D*, F*, 800**							916	915*	914*	888			

1	7	13	19	25	31	37	43	49	55	61	67	75.76
CN	ELM	15X	15X	15X	15X	15X	15X	15X	15X	15X	15X	15X
COEFFICIENTS												6
$\alpha$ OR $\beta$												
SCHEDULES												

TABLE II. (Continued)

TEST: IA/3

## DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: POST-TEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES										NO. OF RUNS	Y-MACH NUMBERS				
		$\alpha$	$\beta$	$\Delta\alpha$	$\Delta\beta$	X	Z			MACH	PT	PCH	RF		0	200	400	800	
RTJ 250	09 Tio/Sr	0	5	-10	-10	0	G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z			4.51	28.9	1500	0	917	930	931	932		
251	(PLUMES ON)			-20	-20		G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z							918	936	937	896		
252				-20	5		G							877	878	879			
253					0		G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z							882	880	881	886		
254					-5		M,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z							919	922	923	887		
255					-10		M,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z							920	932	933	894		
256				-20	-20		M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z							921	935	934	895		
257	(PLUMES OFF)			0	0		A							945	-	-	-		
258				-20	5		A							944	-	-	-		
															</				

TABLE II. (Continued)

DATE: POSTTEST

[illegible]

TABLE II. (Continued)

TEST: IA13

## DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: POSTTEST

[illegible]

ISOLATED ET,  $\Phi$ , and  $\Phi ET$  TABLE II. (Continued)

**TEST: IA 13**

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE \_\_\_\_\_

POST - TEST

[illegible]

	7	13	19	25	31	37	43	49	55	61	67	75	76
CLASS	SX	SX	SX	SX	SA					MACH	ALPHA	6	
COEFFICIENTS													
a ON B	A) -40, -30, -20, -15, -10, -5, 0, 5, 10												
SCHEDULES	B) -11 → 27, AK = 1°												

ISOLATED SRB37



TABLE III. MODEL DIMENSIONAL DATA

MODEL COMPONENT: BODY (R<sub>19</sub>)GENERAL DESCRIPTION: Configuration 3 lightweight Orbiter fuselageModel Scale = 0.010      Model Drawing No. SS-A00062DRAWING NUMBER:      VI.70-000139B

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length ~ in.	<u>1290.3</u>	<u>12.903</u>
Max. Width ~ in. (@ $X_0 = 1528.3$ in.)	<u>267.6</u>	<u>2.676</u>
Max. Depth ~ in. (@ $X_0 = 1480.52$ in.)	<u>244.5</u>	<u>2.445</u>
* Fineness Ratio	<u>4.846</u>	<u>4.846</u>
Area ~ ft. <sup>2</sup>		
Max. Cross-Sectional (@ $X_0 = 1480.52$ in.)	<u>386.67</u>	<u>0.03867</u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

\* Fineness Ratio is the fuselage length divided by the equivalent diameter for the maximum cross-sectional area.



TABLE III. MODEL DIMENSIONAL DATA (CONTINUED)

MODEL COMPONENT: Canopy (C7)

GENERAL DESCRIPTION: Configuration 3 lightweight Orbiter Canopy

Model Scale = 0.010

Model Drawing No. SS-A00062

DRAWING NUMBER

VL70-000139B

DIMENSION:

FULL SCALE

MODEL SCALE

Length ( $X_0 = 433$  IN. to  $X_0 = 670$  IN.)

237

2.370

Max Width

Max Depth

Fineness Ratio

Area

Max Cross-Sectional

Planform

Wetted

Base

TABLE III. MODEL DIMENSIONAL DATA (CONTINUED)

MODEL COMPONENT: Elevon (E<sub>23</sub>)GENERAL DESCRIPTION: Configuration 3 lightweight orbiter elevonsData for (1) of (2) sidesModel Scale = 0.010Model Drawing No. SS-A00109DRAWING NUMBER: VL70-000139B

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area ~ ft. <sup>2</sup>	<u>205.52</u>	<u>0.02055</u>
Span (equivalent) ~ in.	<u>353.34</u>	<u>3.5334</u>
Inb'd equivalent chord ~ in.	<u>114.78</u>	<u>1.1478</u>
Outb'd equivalent chord ~ in.	<u>55.00</u>	<u>0.550</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.208</u>	<u>0.208</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, deg		
Leading Edge	<u>0.00</u>	<u>0.00</u>
Tailing Edge	<u>-10.24</u>	<u>-10.24</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Normal to hinge line) ~ ft <sup>3</sup>	<u>1548.07</u>	<u>0.00155</u>

TABLE III. MODEL DIMENSIONAL DATA (CONTINUED)

MODEL COMPONENT: Body Flap ( $F_5$ )GENERAL DESCRIPTION: Configuration 3 lightweight orbiter body flapModel Scale = 0.010Model Drawing No. SS-A00062

DRAWING NUMBER

VL70-000139EDIMENSION:FULL SCALEMODEL SCALE

Length ~ in.

84.700.8470

Max Width ~ in.

267.62.6760

Max Depth

Fineness Ratio

Area ~ ft.<sup>2</sup>

Max Cross-Sectional

Planform

Wetted

Base

142.51950.0142519538.09580.00380958

TABLE III. MODEL DIMENSIONAL DATA (CONTINUED)

MODEL COMPONENT: OMS Pod ( $M_1$ )

GENERAL DESCRIPTION: Configuration 3 lightweight Orbiter Orbital  
Maneuvering System Pod.

Model Scale = 0.010 Model Drawing No. SS-A00062

DRAWING NUMBER VL70-000139B

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length~in.	<u>346.0</u>	<u>3.460</u>
Max Width~in.	<u>108.0</u>	<u>1.080</u>
Max Depth~in.	<u>113.0</u>	<u>1.13</u>
Fineness Ratio	<u>          </u>	<u>          </u>
Area		
Max Cross-Sectional	<u>          </u>	<u>          </u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

TABLE III. MODEL DIMENSIONAL DATA (CONTINUED)

MODEL COMPONENT: Rudder (R<sub>5</sub>)GENERAL DESCRIPTION: Configuration 3 lightweight Orbiter rudderModel Scale = 0.010Model Drawing No. SS-A00062DRAWING NUMBER:VL70-000139BVL70-000095DIMENSIONS:FULL-SCALEMODEL SCALEArea~ft.<sup>2</sup>106.380.010638

Span (equivalent)~in.

201.02.010

Inb'd equivalent chord~in.

91.5850.91585

Outb'd equivalent chord~in.

50.8330.50833Ratio movable surface chord/  
total surface chord

At Inb'd equiv. chord

0.4000.400

At Outb'd equiv. chord

0.4000.400

Sweep Back Angles, deg.

Leading Edge

34.8334.83

Tailing Edge

26.2526.25

Hingeline

34.8334.83Area Moment (Normal to hinge line)~ft<sup>3</sup>526.130.00053

TABLE III. MODEL DIMENSIONAL DATA (CONTINUED)

MODEL COMPONENT: VERTICAL TAIL (V<sub>7</sub>)GENERAL DESCRIPTION: Configuration 3 lightweight orbiter vertical tail,double wedge airfoil sections with rounded leading edge.

Model Scale = 0.010

Model Drawing No. SS-A00062

DRAWING NUMBER:

VL70-000139 B

VL70-000095,

DIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATA

Area (Theo) ~ ft <sup>2</sup>	413.25	0.04132
Planform		
Span (Theo) ~ in.	315.72	3.1572
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	.404	.404
Sweep Back Angles ~ deg.		
Leading Edge	45.000	45.000
Trailing Edge	26.249	26.249
0.25 Element Line	41.130	41.130
Chords:		
Root (Theo) WP	268.50	2.6850
Tip (Theo) WP	108.47	1.0847
MAC	199.81	1.9981
Fus. Sta. of .25 MAC	1463.50	14.6350
W. P. of .25 MAC	635.522	6.35522
B. L. of .25 MAC	0.00	0.00
Airfoil Section		
Leading Wedge Angle ~ deg.	10.000	10.000
Trailing Wedge Angle ~ deg.	14.920	14.920
Leading Edge Radius ~ in.	2.00	0.020
Void Area ~ ft <sup>2</sup>	13.17	0.0013
Blanketed Area ~ ft <sup>2</sup>	12.67	0.0012

TABLE III. MODEL DIMENSIONAL DATA (CONTINUED)

MODEL COMPONENT: WING ( $W_{107}$ )GENERAL DESCRIPTION: Configuration 3 lightweight Orbiter wing

Model Scale = 0.010

Model Drawing No. SS-A00109

DWG. NO. VL70-000139BDIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATAArea (Theo.) ~ ft<sup>2</sup>

Planform

Span (Theo) ~ in.

Aspect Ratio

Rate of Taper

Taper Ratio

Dihedral Angle, deg. (@ T.E. of Elevon)

Incidence Angle, deg.

Aerodynamic Twist, deg.

Sweep Back Angles, deg.

Leading Edge

Trailing Edge

0.25 Element Line

Chords: ~ in.

Root (Theo) B.P.O.O.

Tip, (Theo) B.P.

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

EXPOSED DATAArea (Theo) ~ ft<sup>2</sup>

Span, (Theo) ~ in. (From B.P. 108 in.)

Aspect Ratio

Taper Ratio

Chords: ~ in.

Root (@ B.P. 108)

Tip

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

Airfoil Section (Rockwell Mod NASA)

XXXX-64

Root  $\frac{T}{c} = @ Y_o 199$  to NAXA 0010Tip  $\frac{T}{c} =$ 

Data for (1) of (2) Sides

Leading Edge Cuff

Planform Area ~ ft<sup>2</sup>

Leading Edge Intersects Fus M. L. @ Sta

Leading Edge Intersects Wing @ Sta

TABLE III. MODEL DIMENSIONAL DATA (CONTINUED)

MODEL COMPONENT: External Tank (T<sub>10</sub>)GENERAL DESCRIPTION: Configuration 3 External Oxygen Hydrogen TankModel Scale = 0.010Model Drawing No. SS-A00108DRAWING NUMBERVL72-000088VL78-000041DIMENSION:FULL SCALEMODEL SCALE

Length~in.

186518.65

Max Diameter~in.

3243.24

Max Depth

Fineness Ratio (Length/Max. Dia.)

5.756175.75617Area~ft<sup>2</sup>

Max Cross-Sectional

572.5550.05726

Planform

Wetted

Base



TABLE III. MODEL DIMENSIONAL DATA (CONCLUDED)

MODEL COMPONENT: Booster (S<sub>g</sub>)

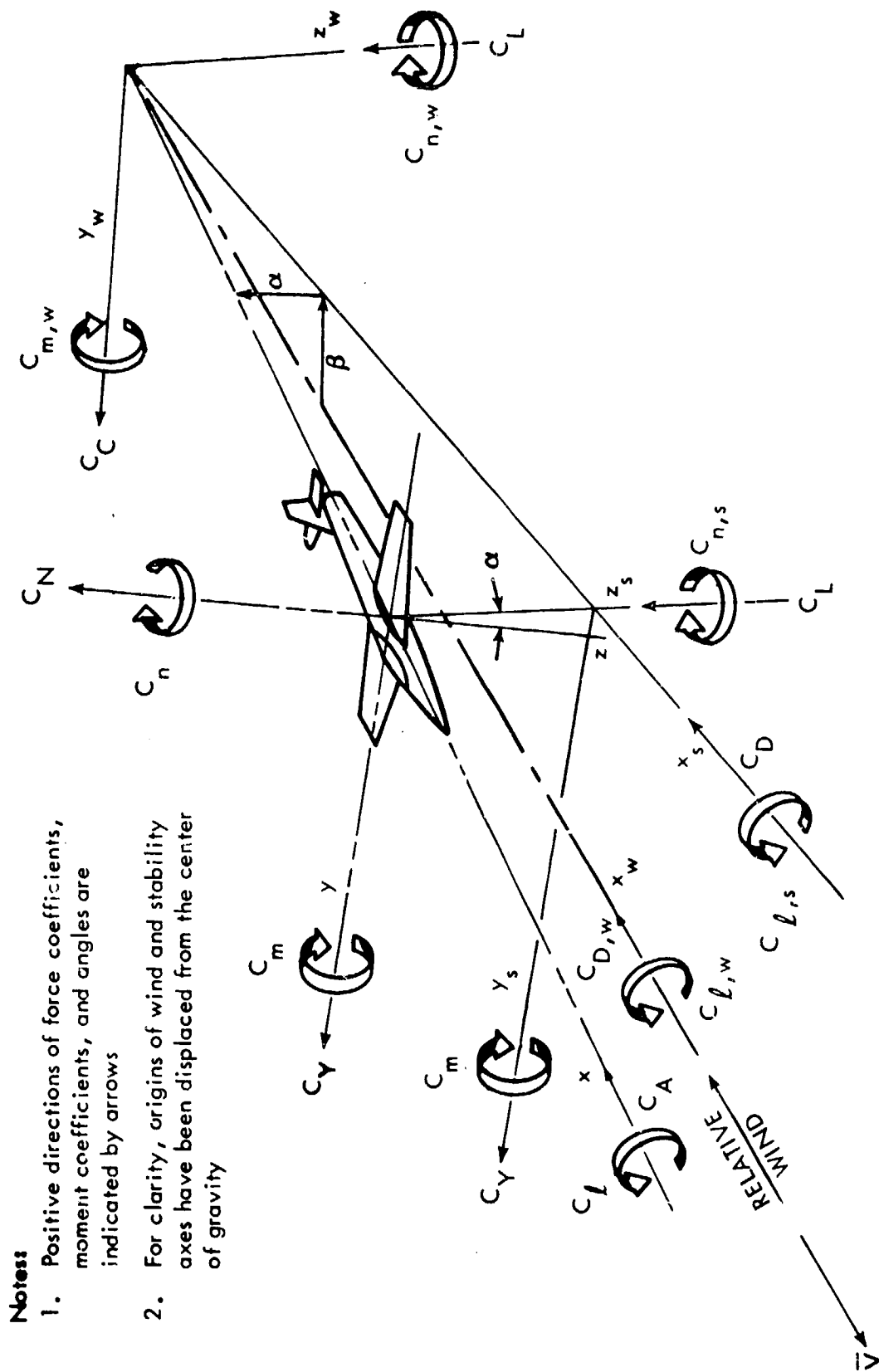
GENERAL DESCRIPTION: Configuration 3 Booster Solid Rocket Motor  
Data for 1 of 2 Boosters

Model Scale 0.010 Model Drawing No. SSA-00113

DRAWING NUMBER VL72-000088  
VL77-000036

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length (Includes Nozzle)~in.	<u>1741.0</u>	<u>17.410</u>
Max Width (Tank Dia.)~in.	<u>142.0</u>	<u>1.420</u>
Max Dia. (Max. Nozzle Shroud Dia.)~in.	<u>205.0</u>	<u>2.050</u>
* Fineness Ratio	<u>8.49268</u>	<u>8.49268</u>
Area~ft <sup>2</sup>		
Max Cross-Sectional (Nozzle Shroud)	<u>229.21</u>	<u>0.02292</u>
Planform	<u>                    </u>	<u>                    </u>
Wetted	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>

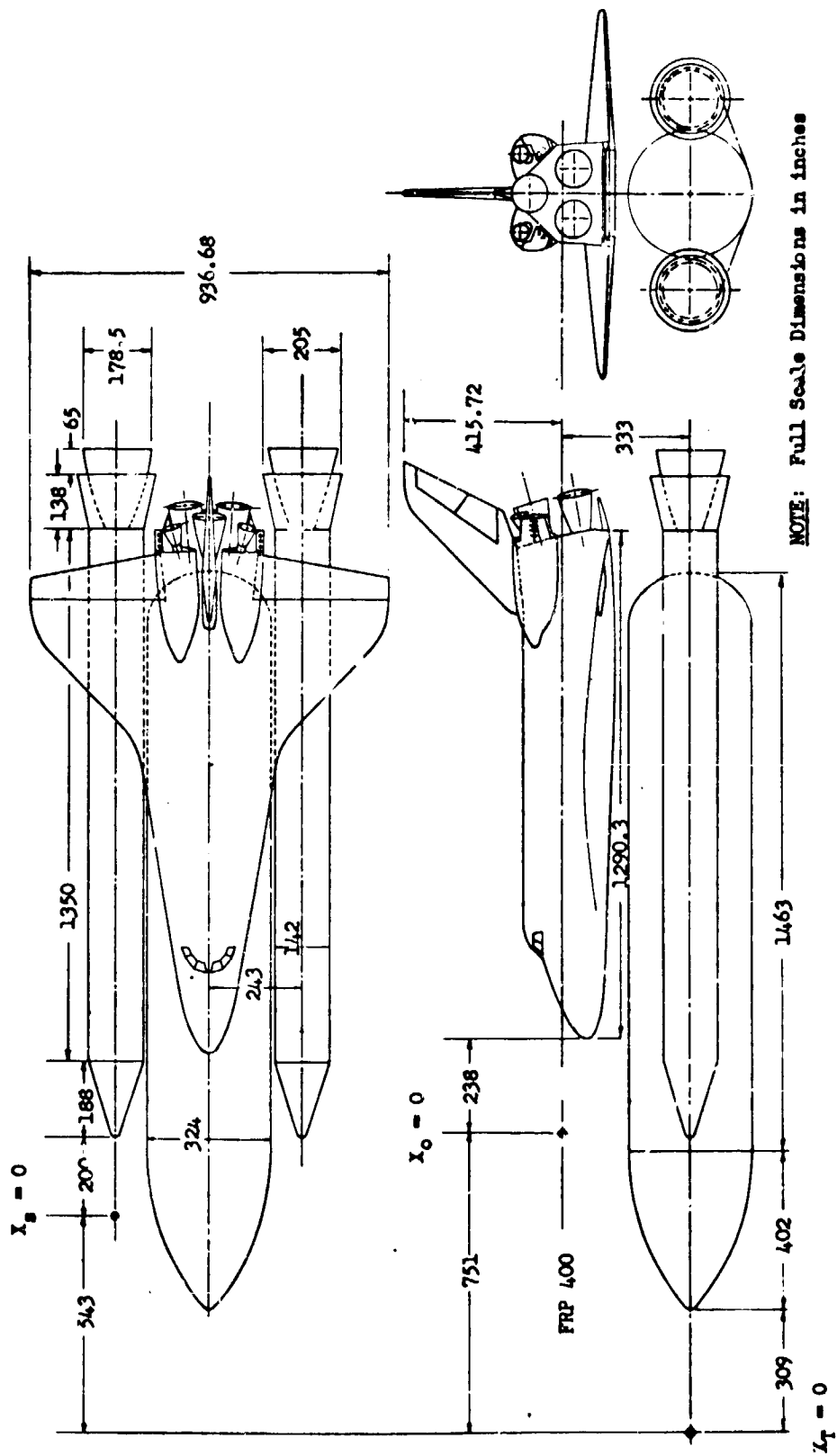
\* Length divided by nozzle shroud diameter.



**Notes:**

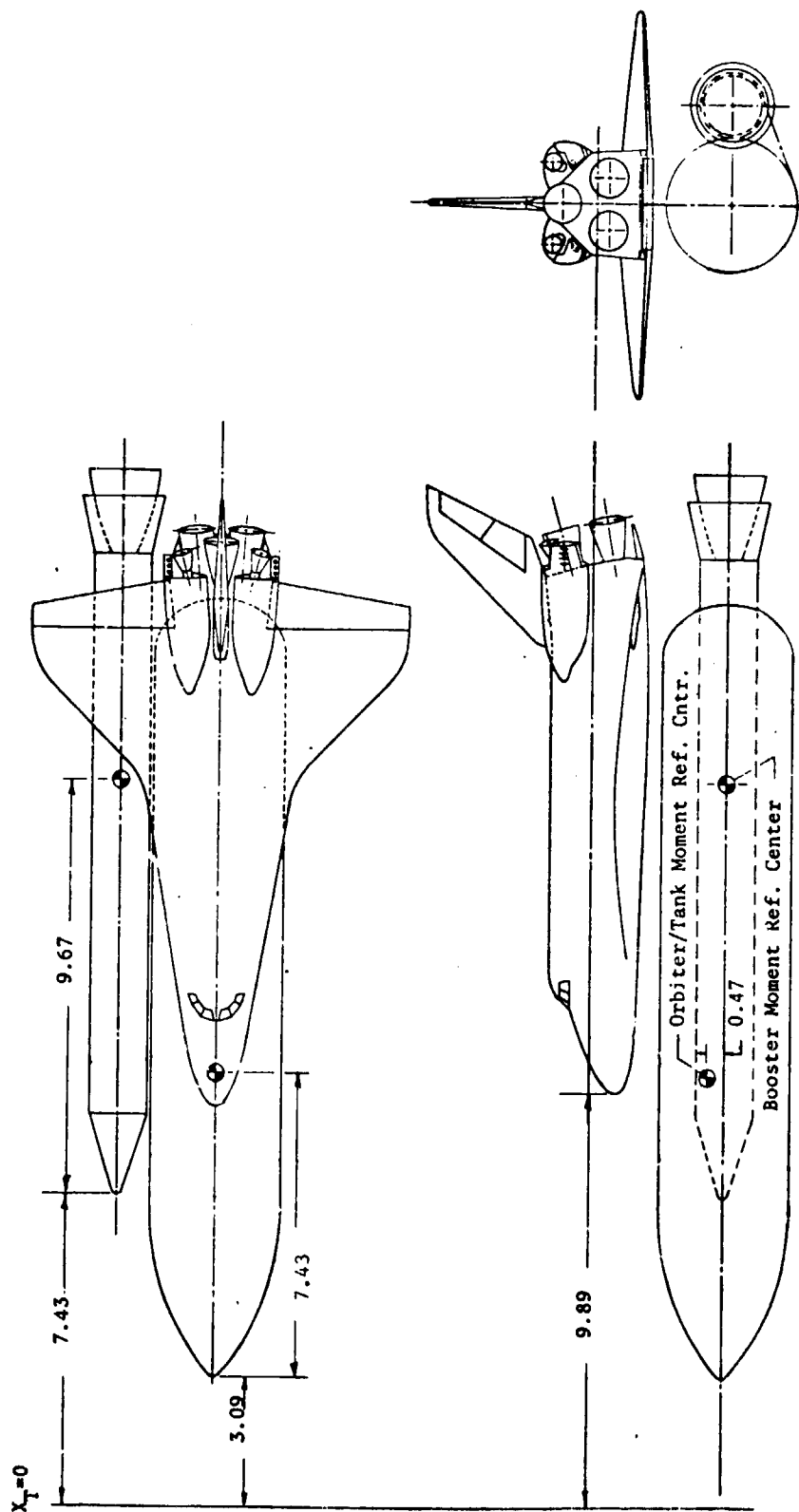
1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

Figure 1. Axis Systems



a. Integrated Vehicle Configuration 3 (Mated)

Figure 2. Model Sketches

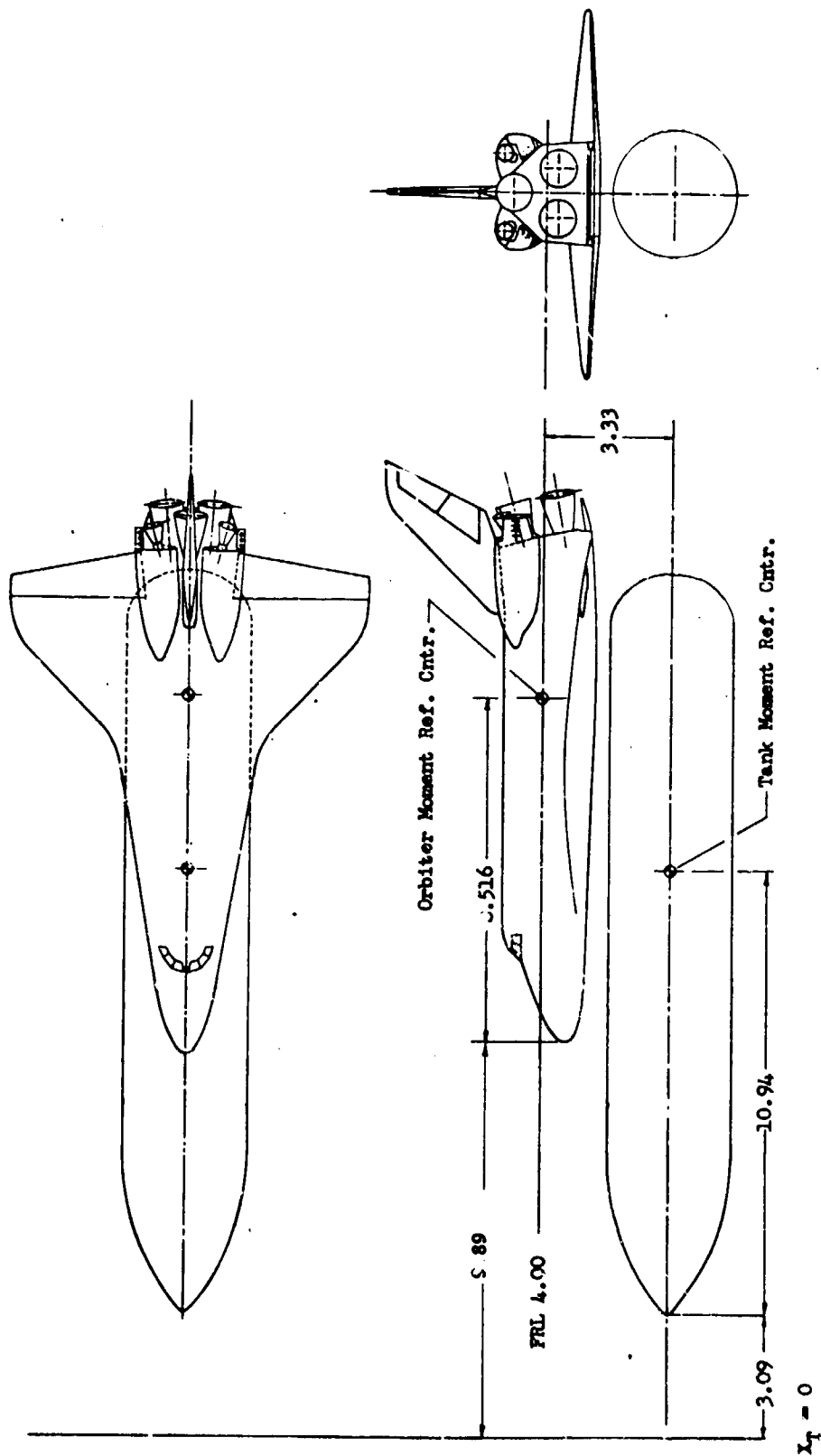


**NOTES:**

1. Only righthand booster used for Booster Separation testing.
2. Orbiter rigidly attached to tank.
3. Mated position shown.
4. All dimensions in inches.

b. Model 32-OTS Integrated Vehicle Configuration 3

Figure 2. - Continued



NOTES:

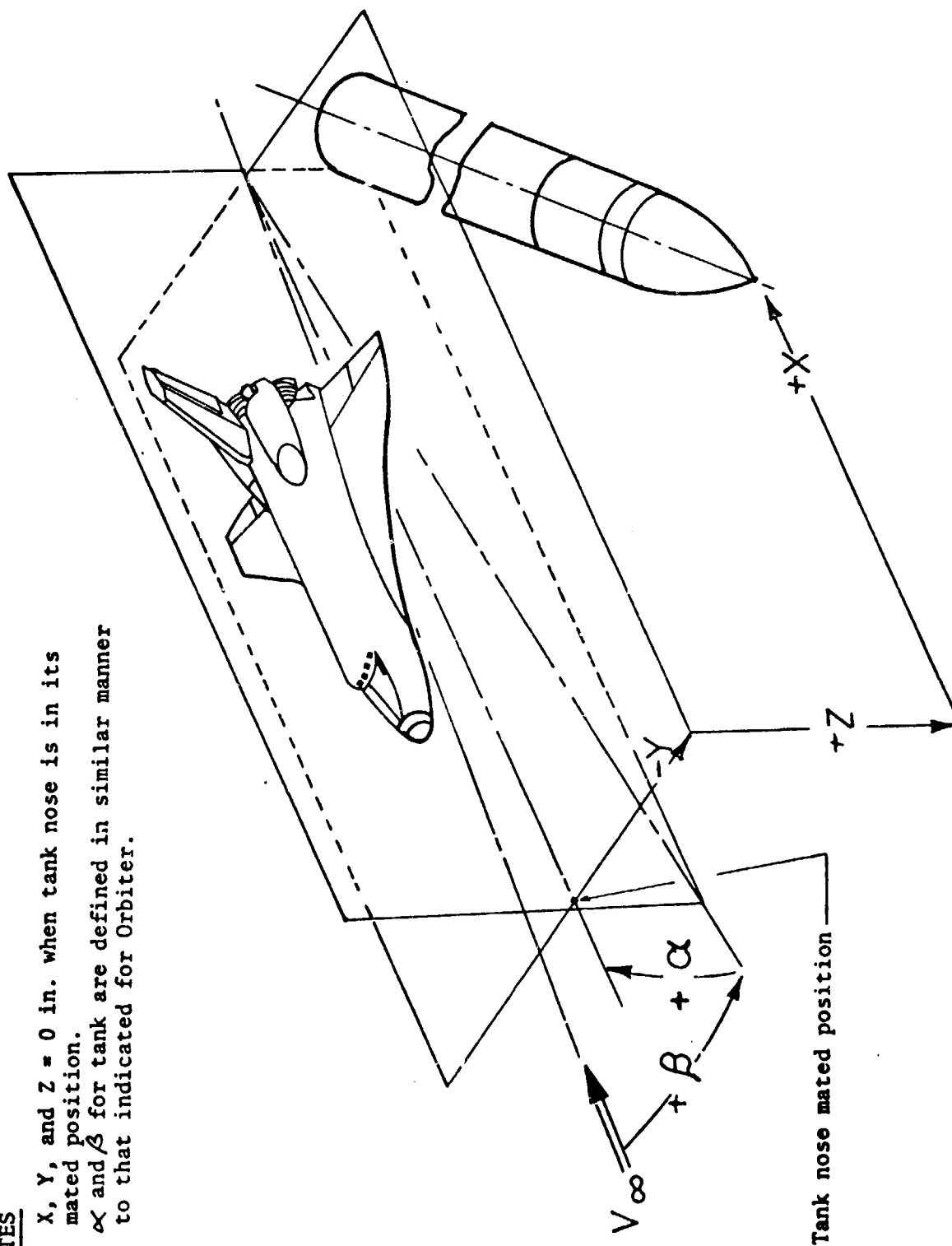
1. Models for Tank separation from Orbiter testing.
2. Mated position shown.
3. All dimensions in inches.

c. Model 32-OTS Orbiter and Tank Configuration 3

Figure 2. - Continued

NOTES

1.  $X$ ,  $Y$ , and  $Z = 0$  in. when tank nose is in its mated position.
2.  $\alpha$  and  $\beta$  for tank are defined in similar manner to that indicated for Orbiter.

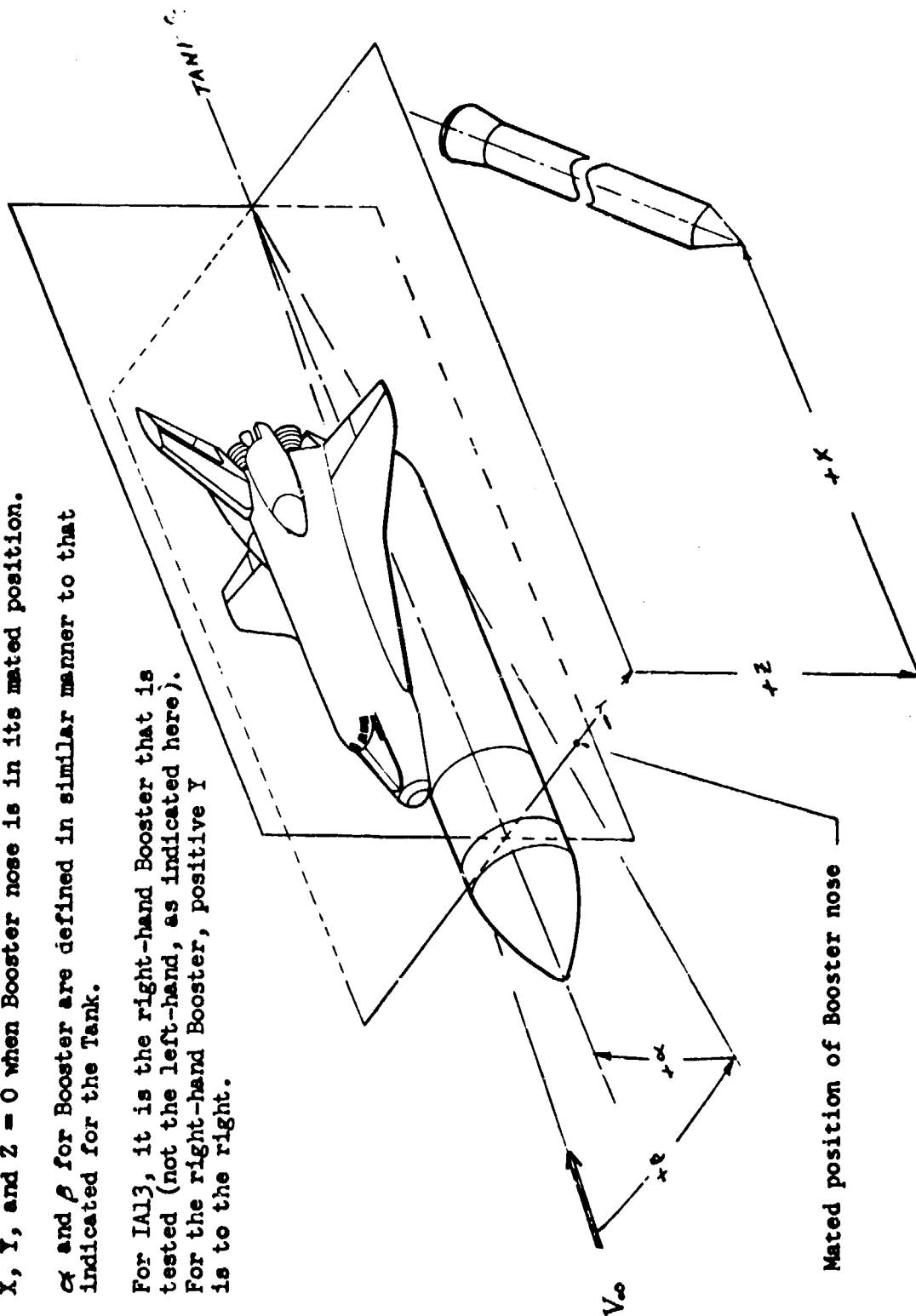


d. Tank Separation from Orbiter

Figure 2. - Continued

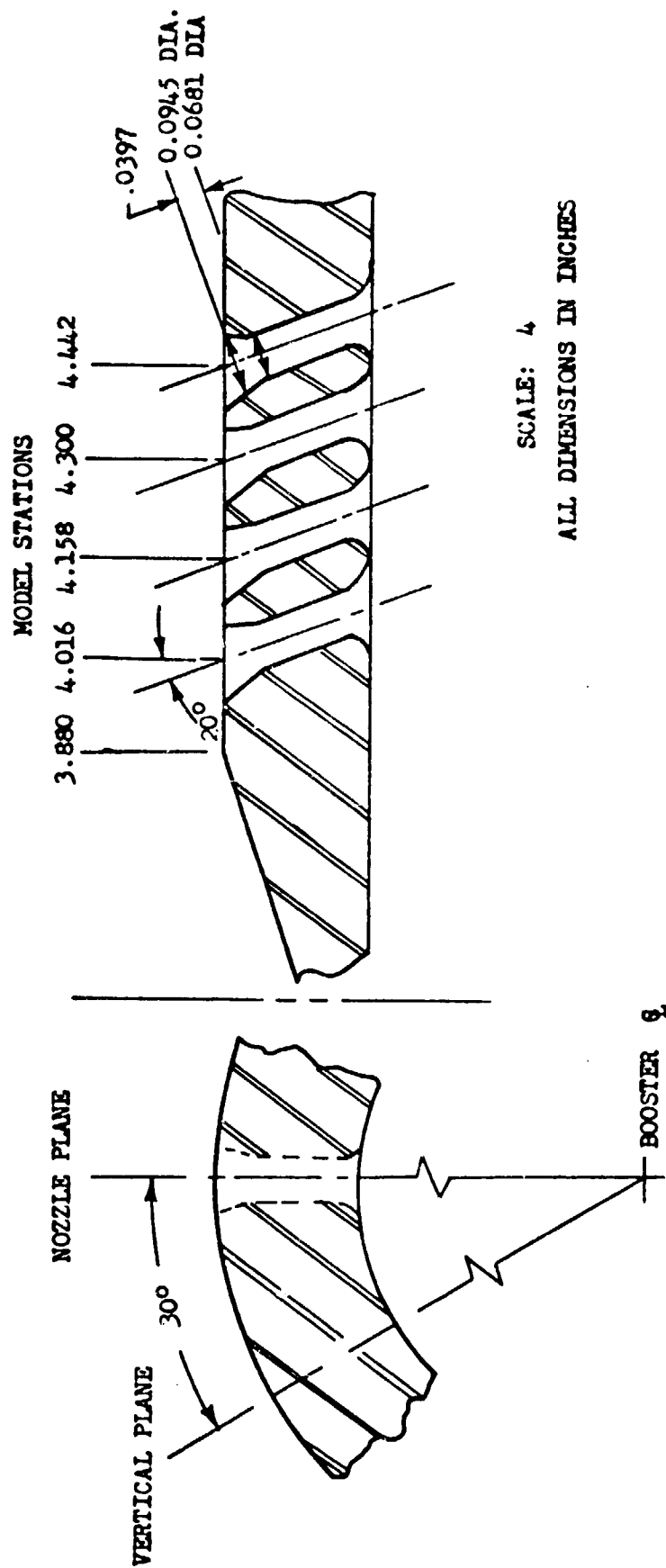
NOTES:

1.  $X$ ,  $Y$ , and  $Z = 0$  when Booster nose is in its mated position.
2.  $\alpha$  and  $\beta$  for Booster are defined in similar manner to that indicated for the Tank.
3. For IAL3, it is the right-hand Booster that is tested (not the left-hand, as indicated here). For the right-hand Booster, positive  $Y$  is to the right.



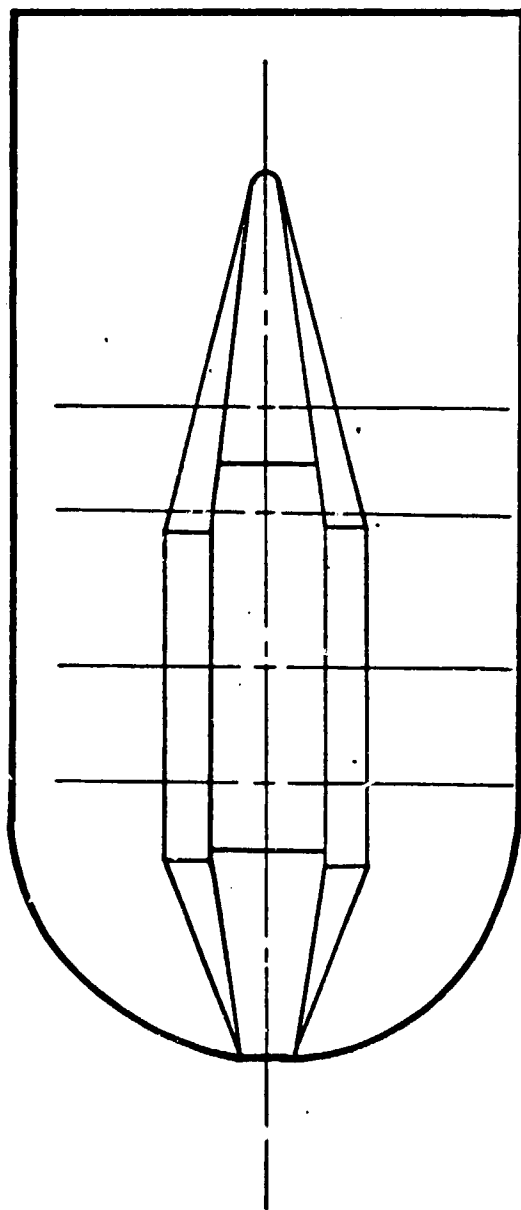
e. Booster Separation from Orbiter/Tank

Figure 2. - Continued

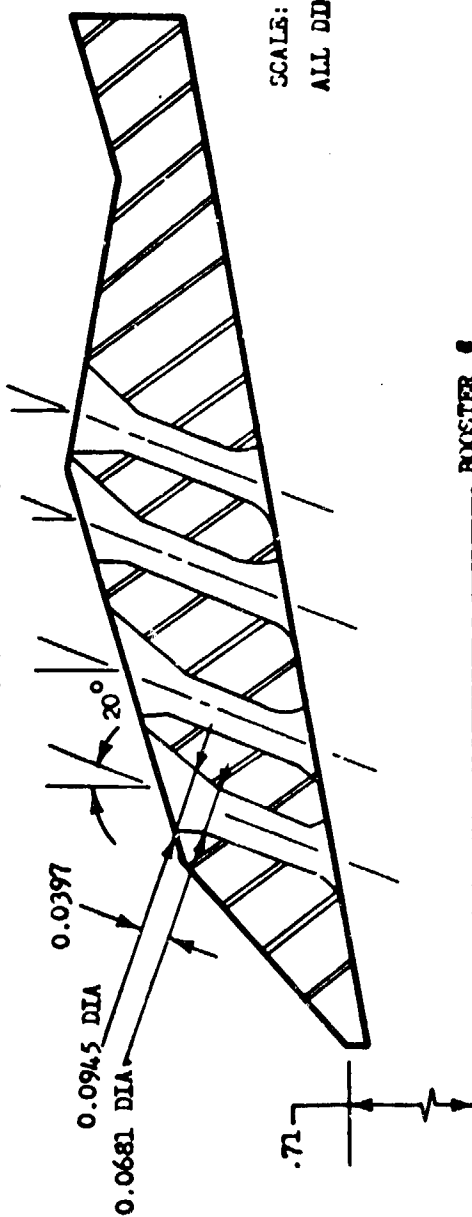


f. 32-OTS Booster Model Forward Thruster Nozzle Block  
Figure 2. - Continued





17.610 17.780 18.005 18.165 18.165 MODEL STATIONS

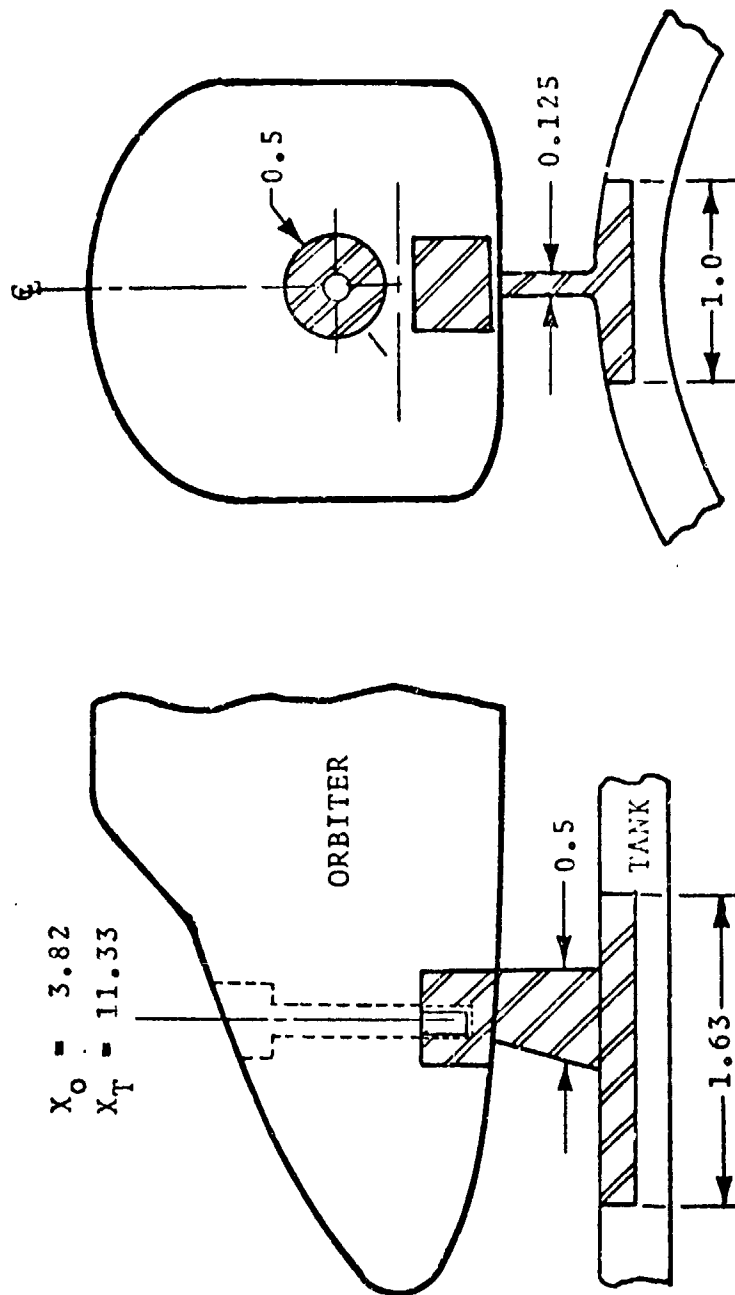


SCALE: 4  
ALL DIMENSIONS IN INCHES

BOOSTER

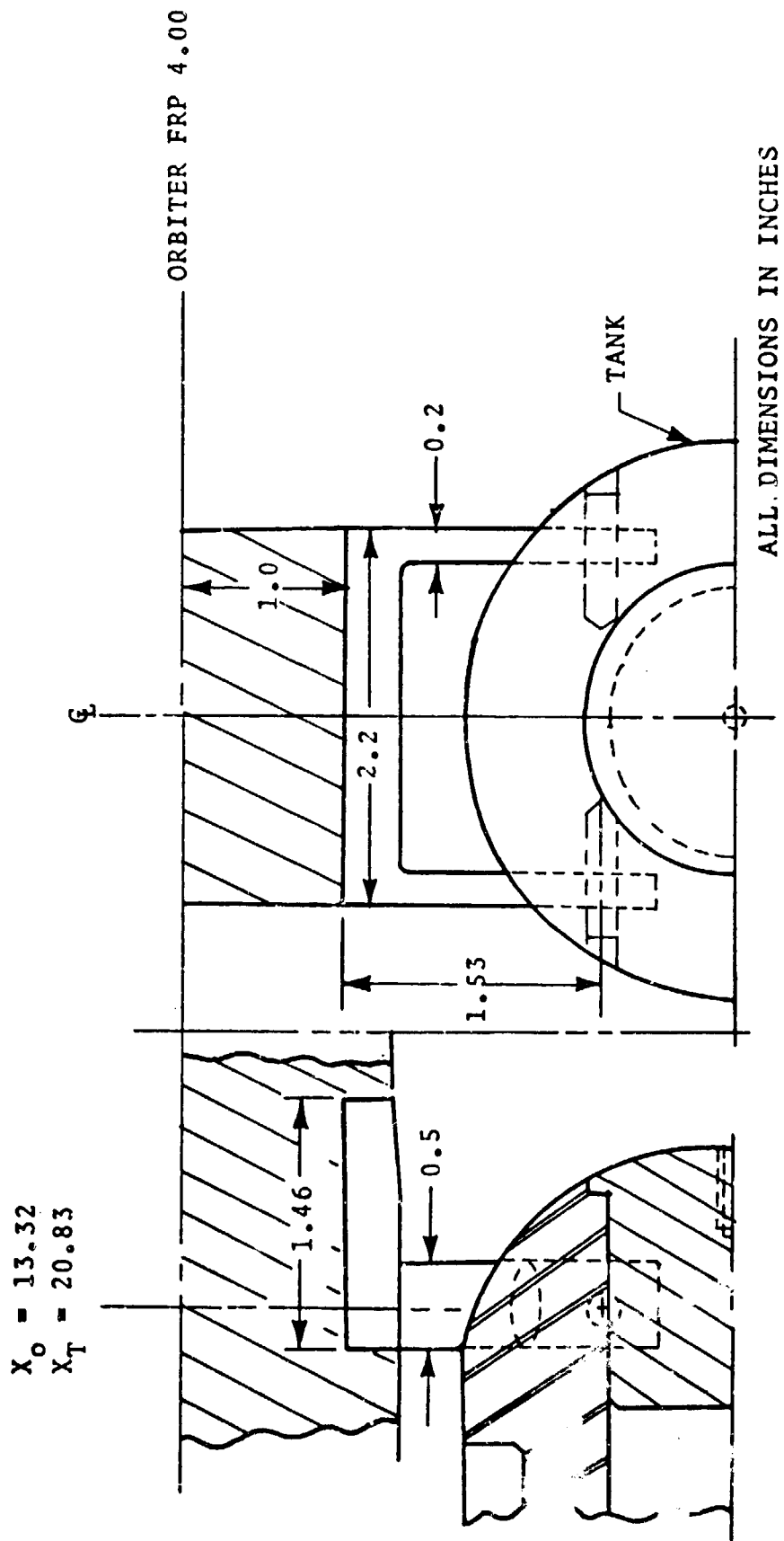
g. 32-OTS Booster Model Aft Thruster Nozzle Block

Figure 2. - Continued



ALL DIMENSIONS IN INCHES

h. 32-OTS Orbiter/Tank Forward Attachment  
Figure 2. - Continued



i. 32-OTS Orbiter/Tank Aft Attachment  
Figure 2. - Continued

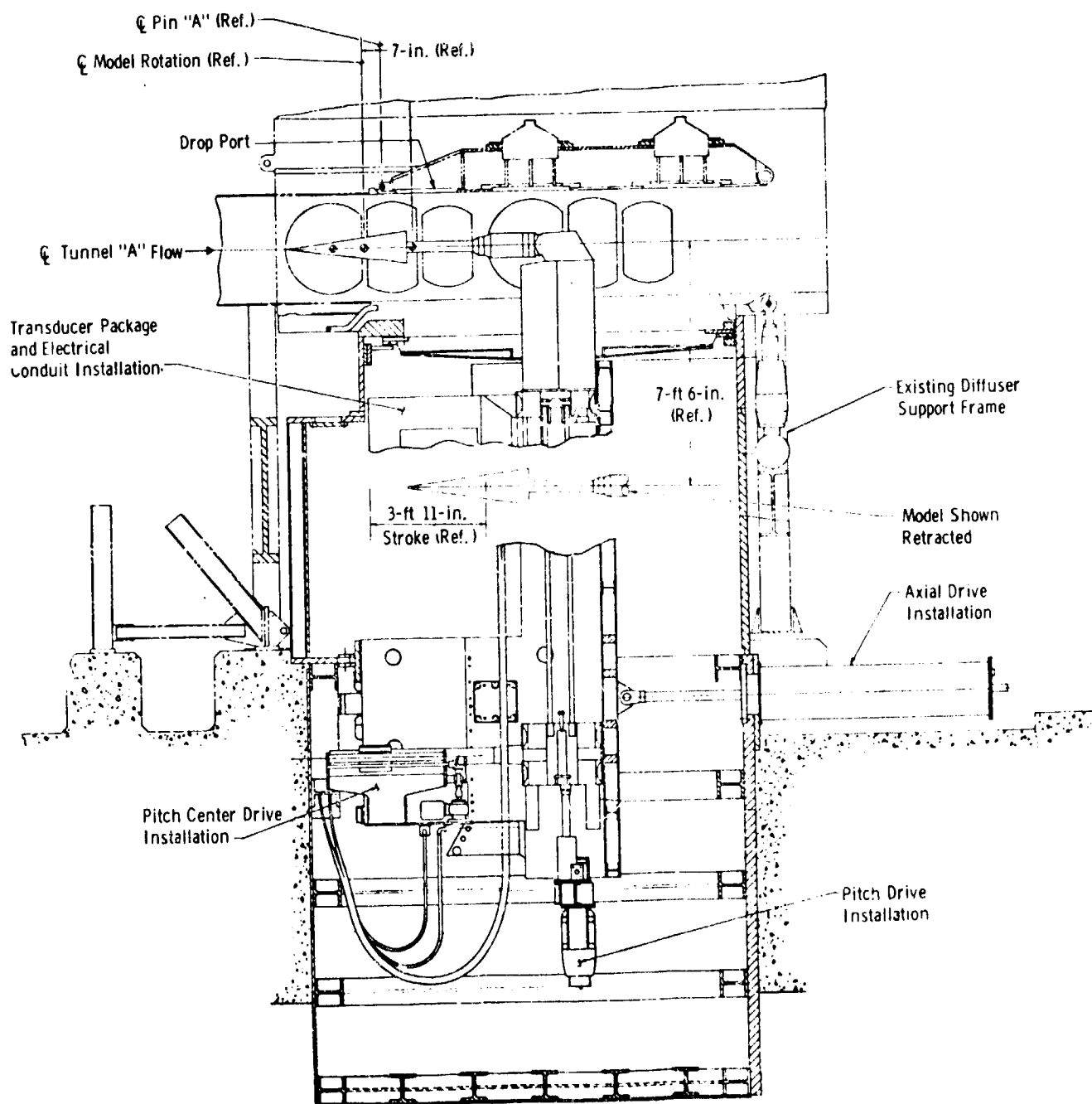


FIGURE 3. AEDC von Karman Gas Dynamic Facility Tunnel A

<u>Volume</u>	<u>Description</u>
I	Data Figures (pages 1 through 894)
II	Data Figures (pages 895 through 1498)
III	Tabulated Source Data

#### TABULATED SOURCE DATA

#### VOLUME III

Tabulations of plotted data are available on request from Data Management Services.

DATE 02 AUG 75

IA13 SOURCE DATA

PAGE 1

IA13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

IRIJ0011 ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.030  
 ALPHA = .000 BETA = .030  
 DALPHA = 5.000 DBETA = .030  
 ELEVTR = .000 AILRON = .030  
 Y = .000

RUN NO. 1/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.290	-3.008	-.07923	-.01582	-.00106	.00003	.00020	.07797
.225	100.860	-.07184	-.00899	-.00215	-.00030	.00026	.09053
.368	199.270	-.02994	.00054	-.00272	-.00055	.00038	.08773
.440	299.560	.00819	-.00793	-.00252	-.00022	.00033	.08819
.398	404.700	.01647	-.01867	-.00240	-.00018	-.00013	.08441
.180	600.870	-.05385	-.01259	-.00202	-.00024	.00024	.08276

RUN NO. 2/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.480	-1.597	-.04233	.00143	-.00294	-.00089	.00046	.09051
400.330	101.140	-.01314	.00122	-.00296	-.00034	.00057	.08587
400.390	198.800	.02300	-.00900	-.00231	-.00029	.00027	.08944
400.290	299.910	.01507	-.01980	-.00221	-.00019	-.00013	.08374
400.300	396.120	-.03456	-.01697	-.00206	-.00021	.00020	.08029
400.290	599.820	-.05462	-.01210	-.00199	-.00023	.00023	.08308

RUN NO. 3/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.610	-.369	.03189	.00502	-.00202	-.00052	.00035	.08645
800.580	100.270	.05119	-.01433	-.00288	-.00011	-.00025	.08720
800.570	203.180	.00410	-.02112	-.00222	-.00019	.00002	.08290
800.570	299.960	-.04086	-.01616	-.00203	-.00020	.00022	.07939
800.680	399.870	-.05473	-.01207	-.00193	-.00023	.00023	.08289
800.610	599.880	-.05463	-.01210	-.00195	-.00022	.00023	.08310

RUN NO. 4/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.500	.139	.07065	-.01927	-.00207	-.00018	-.00020	.08532
1200.500	99.666	.01306	-.02432	-.00197	-.00017	.00007	.08201
1200.700	200.160	-.04652	-.01465	-.00176	-.00021	.00022	.08032
1200.700	299.390	-.05547	-.01158	-.00178	-.00020	.00023	.07759
1200.800	399.400	-.05393	-.01205	-.00177	-.00021	.00023	.08296
1200.700	599.690	-.05393	-.01206	-.00178	-.00022	.00023	.08299

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OF POOR QUALITY

PRECEDING PAGE BLANK NOT FILMED

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

RUN NO. 5/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CA
.048	2.930	-.04940	-.00707	-.00118	-.00014	.07365
-.024	100.670	-.05279	-.01292	-.00149	-.00029	.08938
.029	197.930	-.03122	.00094	-.00265	-.00053	.08951
.076	301.710	.00757	-.00306	-.00224	-.00030	.08763
.105	399.860	.03261	-.01498	-.00204	-.00023	.08966
.156	599.840	-.04560	-.01461	-.00177	-.00020	.07991
.096	799.430	-.05398	-.01207	-.00175	-.00021	.08302
.035	1000.500	-.05357	-.01208	-.00175	-.00021	.08306

RUN NO. 6/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CA
400.180	-1.699	-.02940	.00606	-.00239	-.00091	.09271
400.310	100.250	.00592	.00216	-.00255	-.00055	.08498
400.260	200.090	.02438	-.00330	-.00204	-.00031	.08718
400.360	296.910	.05183	-.01779	-.00253	-.00008	.08697
400.380	399.920	-.00977	-.02052	-.00169	-.00017	.08222
400.300	599.630	-.05400	-.01209	-.00174	-.00020	.08304
400.430	799.280	-.05399	-.01208	-.00175	-.00020	.08305
400.410	1000.100	-.05392	-.01207	-.00173	-.00020	.08297

RUN NO. 7/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CA
800.460	1.704	.07095	.02045	-.00187	-.00073	.08410
800.470	99.956	.07531	-.01045	-.00289	-.00007	.08925
800.510	200.090	.03869	-.02175	-.00211	-.00015	.08388
800.440	300.950	-.02016	-.02000	-.00186	-.00016	.07957
800.520	400.080	-.05150	-.01299	-.00171	-.00019	.08127
800.470	599.990	-.05395	-.01209	-.00173	-.00019	.08304
800.600	799.600	-.05389	-.01209	-.00175	-.00020	.08300
800.450	1000.000	-.05394	-.01209	-.00176	-.00020	.08304

## PARAMETER DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 CALPHA = .000 DBETA = .000  
 ELEVTR = .000 AIRCON = .000  
 Y = .000

CR. CA  
 .00000 .07365  
 .00021 .08938  
 .00023 .08951  
 .00037 .08763  
 .00027 .08966  
 .00022 .07991  
 .00022 .08302  
 .00022 .08306

CR. CA  
 .00030 .09271  
 .00034 .08498  
 .00014 .08718  
 -.00007 .08697  
 .00010 .08222  
 .00022 .08304  
 .00023 .08305  
 .00023 .08297

CR. CA  
 .00015 .08410  
 .00018 .08925  
 -.00016 .08388  
 .00016 .07957  
 .00022 .08127  
 .00019 .08304  
 .00022 .08300  
 .00022 .08304

DATE 02 AUG 75 1A13 SOURCE DATA

1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ002) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = .000  
Y .000

RUN NO. 8/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	14200	.14200	-.01765	-.00212	-.00019	-.00041	.08544
1200.700	99.731	.05015	-.02684	-.00178	-.00013	-.00002	.08275
1200.700	200.050	-.03071	-.01897	-.00152	-.00016	.00020	.07862
1200.700	299.320	-.05389	-.01173	-.00153	-.00016	.00022	.07963
1200.800	399.500	-.05401	-.01168	-.00153	-.00017	.00022	.07896
1200.800	599.310	-.05295	-.01204	-.00151	-.00018	.00022	.08288
1200.800	800.260	-.05292	-.01206	-.00147	-.00018	.00022	.08294
1200.800	1000.000	-.05303	-.01208	-.00146	-.00018	.00022	.08298

1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ003) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = .000  
Y 200.000

RUN NO. 12/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
1003	734	-.04693	-.01342	-.00811	-.00090	.00040	.08355
.079	103.180	-.03241	-.00800	.00211	-.00371	-.00023	.09200
.200	199.750	-.01768	-.00012	.00900	.00412	-.00213	.08620
.012	300.210	.00801	-.00661	.00667	.00041	-.00240	.08718
.175	397.220	.01320	-.01574	.00641	-.00134	.00168	.08671
.183	600.110	-.04889	-.01350	-.00132	-.00022	.00037	.07945
.137	799.940	-.05289	-.01206	-.00146	-.00017	.00022	.08230
.213	1000.000	-.05304	-.01207	-.00149	-.00018	.00022	.08289

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DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

00000030 131 JUL 75

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 P/TOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVR = .000 AILFON = .000  
 Y = 200.000

RUN NO. 11/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
400.330	-181	-00878	.00005	.01286	.00324	-00000	.08774
400.370	101.650	.09176	-.00233	.00918	.00342	-00000	.08430
400.360	203.320	.01454	-.00846	.00934	-.00047	-00000	.08641
400.340	303.750	.01854	-.01845	.00624	-.00157	-00000	.08700
400.320	400.850	-.01173	-.02078	.00657	-.00059	-00000	.08215
400.320	500.130	-.05295	-.01208	-.00145	-.00018	-00000	.08291
400.330	799.710	-.05298	-.01205	-.00146	-.00018	-00000	.08277
400.380	999.750	-.05297	-.01208	-.00148	-.00018	-00000	.08296

RUN NO. 10/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
800.910	-4.261	.02869	-.00308	.01340	.00246	.00018	.08245
800.440	100.160	.02224	-.01241	.01115	-.00132	.00132	.08665
800.470	200.160	.03078	-.02233	.00520	-.00160	.00815	.08644
800.520	299.940	-.02408	-.01946	.00008	-.00045	.00367	.07941
800.540	399.530	-.05357	-.01191	-.00143	-.00018	.00223	.08071
800.520	599.770	-.05308	-.01208	-.00146	-.00018	.00222	.08291
800.580	799.980	-.05297	-.01208	-.00146	-.00019	.00222	.08285
800.580	1000.200	-.05295	-.01208	-.00146	-.00018	.00222	.08289

RUN NO. 9/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	.376	.09554	-.02332	.01469	-.00273	.01028	.08967
1200.800	100.340	.03780	-.02905	.00359	-.00111	.00954	.09234
1200.700	200.370	-.04301	-.01541	-.00085	-.00332	.00075	.07747
1200.700	300.510	-.05431	-.01158	-.00143	-.00118	.00222	.07749
1200.700	400.470	-.05291	-.01208	-.00142	-.00019	.00222	.08393
1200.800	599.630	-.05237	-.01207	-.00145	-.00019	.00222	.08294
1200.800	799.740	-.05292	-.01207	-.00145	-.00018	.00222	.08290
1200.800	999.900	-.05297	-.01206	-.00146	-.00018	.00222	.08286

DATE 02 AUG 75

1A13 SOURCE DATA

PAGE 5

(RTJ004) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
ELEVTR = .000 AIRRON = .000  
Y = 200.000

RUN NO. 13/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.088	.646	-.03203	-.00766	-.01509	-.00049	-.00271	.07864
.024	100.430	-.02973	-.00907	-.00509	.00230	-.00169	.09210
.128	199.810	-.01457	.00140	.00848	.00408	-.00295	.06648
.044	302.600	.01280	-.00507	.00413	.00075	-.00242	.08759
.012	400.050	.02409	-.01543	.00562	-.00119	.00052	.08687
.101	599.900	-.04582	-.01431	-.00127	-.00023	.00039	.07992
.107	799.860	-.05292	-.01206	-.00146	-.00017	.00022	.08281
.032	999.840	-.05295	-.01208	-.00148	-.00017	.00022	.08285

RUN NO. 14/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.280	-.803	.00819	.00518	.00591	.00842	-.00368	.08848
400.330	100.200	.01272	-.00077	.00559	.00394	-.00265	.08458
400.240	198.090	.02630	-.00638	.00624	.00021	-.00273	.08668
400.360	300.080	.03000	-.01798	.00586	-.00138	.00304	.08712
400.350	400.040	-.00630	-.02137	.00227	-.00049	.00390	.08222
400.290	598.730	-.05416	-.01169	.00149	-.00015	.00021	.07873
400.330	799.720	-.05304	-.01210	-.00146	-.00016	.00021	.08301
400.350	1000.200	-.05293	-.01208	-.00148	-.00016	.00022	.08287

RUN NO. 15/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.430	-.110	.05674	.00024	.01075	.00296	-.00208	.08186
800.560	99.904	.04079	-.01195	.00914	-.00095	.00033	.08662
800.540	200.070	.04114	-.02286	.00306	-.00113	.00770	.08546
800.500	300.650	-.01922	-.02039	-.00011	-.00040	.00235	.07948
800.530	400.130	-.05209	-.01242	-.00144	-.00016	.00026	.08101
800.550	599.950	-.05284	-.01206	-.00148	-.00016	.00022	.08280
900.540	799.540	-.05289	-.01205	-.00148	-.00016	.00022	.08279
800.560	1000.100	-.05293	-.01207	-.00150	-.00017	.00022	.08286

(RTJ005) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = 5.000  
 ELEVTR = .000 AILRON = .000  
 Y = 200.000

RUN NO. 16/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	1.862	.12402	-.02455	.01315	-.00245	.0114	.08075
1200.900	99.687	.04697	-.02935	.00309	-.00093	.006	.08095
1200.700	200.000	-.03778	-.01698	-.00075	-.00032	.0019	.07744
1200.700	299.830	-.05430	-.01170	-.00146	-.00018	.00022	.07000
1200.800	399.470	-.05397	-.01179	-.00146	-.00016	.00022	.08018
1200.800	599.460	-.05306	-.01208	-.00145	-.00017	.00022	.08292
1200.700	800.190	-.05304	-.01209	-.00147	-.00017	.00022	.08299
1200.800	1000.100	-.05302	-.01209	-.00149	-.00016	.00022	.08295

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = 5.000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ005) (31 JUL 75)

RUN NO. 20/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
-.057	.791	-.06154	-.01023	-.00766	-.01111	.00217	.07361
.046	98.984	-.05796	-.01333	-.00507	-.00053	-.00166	.08975
.117	199.420	-.02911	.00131	-.00679	-.00188	-.00011	.08979
.129	301.810	.00765	-.00299	-.00527	-.00034	.00074	.08721
.153	398.300	.03339	-.01461	-.00454	.00020	.00023	.08900
.097	600.250	-.04486	-.01472	-.00177	-.00011	.00014	.07968
.084	799.890	-.05354	-.01209	-.00163	-.00015	.00022	.08308
.190	1000.200	-.05350	-.01207	-.00161	-.00015	.00022	.08305



DATE 02 AUG 75

(RTJ005) ( 31 JUL 75 )

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1089.8000 IN. X0  
 LRF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BRF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 P/TOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 19/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.480	-1.282	-.02868	.00488	-.00828	-.00308	-.00138	.09319
400.250	101.810	.00635	.00218	-.00725	-.00128	-.00082	.08457
400.330	199.790	.02602	-.00383	-.00488	-.00029	.00005	.08829
400.490	299.910	.04819	-.01832	-.00620	.00075	-.00219	.08747
400.370	401.290	-.00883	-.02052	-.00227	-.00003	-.00099	.08074
400.430	600.080	-.05310	-.01205	-.00148	-.00015	.00022	.08295
400.350	799.680	-.05303	-.01205	-.00147	-.00015	.00022	.08295
400.450	999.870	-.05311	-.01205	-.00151	-.00015	.00012	.08297

RUN NO. 18/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.570	.901	.07055	.01785	-.00556	-.00204	-.00178	.08-33
800.540	100.230	.06825	-.00948	-.00717	.00052	-.00075	.08691
800.570	199.970	.04335	-.02200	-.00332	.00009	-.00307	.08396
800.510	300.110	-.01856	-.02009	-.00212	-.00003	-.00046	.07875
800.500	398.920	-.05086	-.01295	-.00153	-.00015	.00018	.08017
800.650	599.960	-.05313	-.01205	-.00153	-.00016	.00022	.08295
800.620	799.770	-.05309	-.01206	-.00152	-.00016	.00022	.08295
800.600	1000.100	-.05304	-.01205	-.00153	-.00016	.00022	.08291

RUN NO. 17/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.600	1.160	.14235	-.01808	-.00596	.00019	-.00555	.08610
1200.700	100.490	.05101	-.02717	-.00328	.00008	-.00237	.08279
1200.700	200.690	-.03069	-.01895	-.00184	-.00008	.00001	.07860
1200.600	300.480	-.05378	-.01182	-.00147	.00022	.00047	.08047
1200.700	400.590	-.05307	-.01206	-.00147	-.00016	.00022	.08285
1200.700	599.640	-.05326	-.01208	-.00146	-.00018	.00022	.08299
1200.700	799.720	-.05303	-.01206	-.00145	-.00017	.00022	.08293
1200.600	999.950	-.05300	-.01208	-.00147	-.00016	.00022	.08300

## IA13 EXTERNAL TANK(T10) SEPARATING FROM ORB. 08

(RTJ005) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 ELEVTR = .000 AILTRON = .000  
 Y = .000

RUN NO. 21/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.117	199.110	.01441	-.00490	-.00232	-.00045	.00017	.09520
.111	301.420	.01772	-.00007	-.00235	-.00036	.00025	.08679
.011	399.810	.04043	-.00391	-.00204	-.00012	.00002	.08901
.063	600.700	-.02626	-.01835	-.00169	-.00012	.00018	.07940
.199	799.930	-.05349	-.01206	-.00157	-.00015	.00022	.08298
.097	999.320	-.05356	-.01207	-.00157	-.00015	.00022	.08302
.502	1300.300	-.05346	-.01207	-.00159	-.00015	.00022	.08297

RUN NO. 22/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.310	199.820	.05598	-.00376	-.00272	-.00013	.00023	.08530
400.280	300.200	.06355	-.01323	-.00192	-.00019	.00033	.08934
400.330	399.880	.02750	-.02301	-.00182	-.00011	.00003	.08180
400.330	599.810	-.05404	-.01194	-.00162	-.00014	.00022	.08108
400.400	799.900	-.05354	-.01206	-.00166	-.00014	.00022	.08304
400.450	1000.300	-.05360	-.01208	-.00164	-.00015	.00022	.08310
400.520	1300.200	-.05352	-.01208	-.00162	-.00015	.00022	.08304

RUN NO. 23/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.510	200.390	.08465	-.02173	-.00221	-.00006	-.00035	.08203
800.540	302.760	.01127	-.02396	-.00186	-.00010	.00009	.07921
800.620	400.420	-.04009	-.01632	-.00164	-.00013	.00021	.07870
800.510	600.010	-.05321	-.01205	-.00161	-.00015	.00022	.08286
800.440	799.760	-.05325	-.01206	-.00160	-.00014	.00022	.08290
800.500	1000.000	-.05326	-.01205	-.00161	-.00014	.00022	.08286
800.610	1299.700	-.05332	-.01205	-.00160	-.00014	.00022	.08295

RUN NO. 24/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	199.860	-.00064	-.02519	-.00186	-.00009	.00014	.07686
1200.600	297.210	-.04951	-.01357	-.00170	-.00014	.00022	.08038
1200.600	399.690	-.05530	-.01144	-.00165	-.00015	.00021	.07560
1200.700	599.070	-.05337	-.01207	-.00168	-.00014	.00022	.08295
1200.700	800.140	-.05327	-.01204	-.00165	-.00014	.00022	.08293
1201.000	1000.100	-.05327	-.01207	-.00165	-.00014	.00022	.08293
1200.800	1299.600	-.05327	-.01205	-.00163	-.00014	.00022	.08289

(RTJ007) ( 31 JUL 75 )

1A13 SOURCE DATA

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. OS

DATE 02 AUG 75

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = .000 ALLROM = .000  
Y = .000

RUN NO. 25/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	C/N	CBL	CA
.057	299.870	.13527	-.00179	-.00303	-.00053	.00001	.09329
-.116	399.570	.08932	-.01104	-.00232	-.00020	.00018	.08733
.108	602.610	.01073	-.02301	-.00188	-.00009	.00006	.07823
.241	800.210	-.05315	-.01201	-.00159	-.00014	.00022	.08257
.008	999.310	-.05318	-.01206	-.00164	-.00014	.00022	.08289
-.029	1299.500	-.05315	-.01205	-.00162	-.00014	.00022	.08283

RUN NO. 26/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	C/N	CBL	CA
400.430	300.010	.12683	-.01885	-.00150	-.00017	.00005	.08617
400.450	399.490	.08566	-.02482	-.00156	-.00008	-.00005	.08024
400.340	600.490	-.04710	-.01379	-.00125	-.00010	.00021	.07727
400.340	800.040	-.05188	-.01204	-.00120	-.00012	.00021	.09279
400.230	999.620	-.05191	-.01203	-.00121	-.00012	.00021	.08281
400.400	1300.400	-.05187	-.01203	-.00120	-.00012	.00021	.09279

RUN NO. 27/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	C/N	CBL	CA
800.500	300.180	.06055	-.02904	-.00147	-.00008	.00004	.07787
800.700	401.080	-.01999	-.02053	-.00126	-.00009	.00019	.07565
800.620	600.210	-.05178	-.01202	-.00117	-.00012	.00021	.08265
800.640	799.760	-.05182	-.01204	-.00119	-.00012	.00021	.08282
800.690	1000.100	-.05184	-.01206	-.00119	-.00011	.00021	.08288
800.580	1299.700	-.05174	-.01203	-.00119	-.00011	.00021	.08272

RUN NO. 28/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	C/N	CBL	CA
1200.700	300.080	-.03622	-.01758	-.00131	-.00011	.00020	.07817
1200.700	399.980	-.05347	-.01158	-.00130	-.00010	.00021	.07750
1200.500	599.710	-.05195	-.01204	-.00125	-.00012	.00021	.08279
1200.700	799.760	-.05190	-.01204	-.00124	-.00012	.00021	.08278
1200.800	1000.300	-.05189	-.01204	-.00124	-.00012	.00021	.08281
1200.700	1299.500	-.05183	-.01205	-.00124	-.00011	.00021	.08281

IA13, EXTERNAL TANK (110) SEPARATING FROM ORB. 09

(RTJL 3) (31 JUL 75)

## REFERENCE DATA

SREF = 2590.0000 SQ.FT. XPRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARALLEL DATA

MACH = 4.000 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVT = .000 AILRON = .000  
 Y = 200.000

RUN NO. 32/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.062	299.780	.10414	-.00815	.02423	.00260	.00739	.08305
.149	399.940	.07020	-.01228	.01310	-.00046	.00133	.08787
.263	600.000	.00741	-.02267	.00193	-.00076	.00623	.07890
.222	798.100	-.05313	-.01156	-.00121	-.00010	.00020	.07768
.209	1000.100	-.05173	-.01202	-.00122	-.00011	.00020	.08264
.366	1300.900	-.05174	-.01203	-.00125	-.00011	.00020	.08265

RUN NO. 31/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.280	300.140	.08101	-.01780	.01578	-.00183	.00396	.08501
400.310	399.980	.04753	-.02320	.00787	-.00182	.00634	.08156
400.370	600.050	-.05024	-.01258	-.00118	-.00011	.00030	.07792
400.350	799.870	-.05156	-.01201	-.00120	-.00011	.00021	.08255
400.350	999.740	-.05182	-.01203	-.00122	-.00012	.00021	.08266
400.370	1300.200	-.05171	-.01203	-.00123	-.00011	.00021	.08270

RUN NO. 30/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.820	300.380	.05239	-.02809	.00522	-.00139	.01146	.07825
800.690	400.030	-.02588	-.01935	.00018	-.00031	.00214	.07525
800.420	599.160	-.05304	-.01165	-.00121	-.00011	.00021	.07883
800.560	799.850	-.05192	-.01203	-.00122	-.00011	.00021	.08274
800.730	1000.300	-.05185	-.01203	-.00124	-.00011	.00021	.08272
800.650	1299.800	-.05175	-.01203	-.00124	-.00011	.00021	.08287

RUN NO. 29/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	299.910	-.04634	-.01406	-.00102	-.00015	.00045	.07739
1200.900	401.290	-.05350	-.01142	-.00117	-.00011	.00020	.07542
1200.700	600.030	-.05171	-.01202	-.00119	-.00012	.00021	.08269
1200.800	799.820	-.05171	-.01205	-.00122	-.00011	.00021	.08278
1200.900	1000.500	-.05166	-.01203	-.00120	-.00012	.00021	.08269
1200.800	1299.300	-.05176	-.01205	-.00123	-.00011	.00021	.08280

REFERENCE DATA  
 SREF = 2890.0000 SQ.FT. XMRP = 1089.8000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

PARAMETRIC DATA  
 MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = 5.000  
 ELEVTR = .000 AILRON = .000  
 Y = 200.000

RUN NO. 33/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CEB	CA
-0.33	300.160	.14718	-.00544	.01464	.00395	-.00094	.09023
-.081	399.610	.09368	-.01428	.00851	.00032	-.00079	.08782
.245	602.350	.01143	-.02345	.00125	-.00060	.00540	.07842
.204	800.040	-.05146	-.01201	-.00119	-.00011	.00020	.08248
.043	999.300	-.05134	-.01200	-.00125	-.00011	.00020	.08247
.115	1299.900	-.05168	-.01203	-.00123	-.00011	.00020	.08271

RUN NO. 34/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CEB	CA
400.510	300.060	.11991	-.02245	.01191	-.00085	.00070	.08474
400.340	399.810	.06264	-.02442	.00695	-.00161	.00591	.08271
400.440	600.320	-.04905	-.01298	-.00118	-.00010	.00031	.07727
400.310	799.940	-.05158	-.01203	-.00122	-.00011	.00020	.08277
400.410	1000.100	-.05145	-.01201	-.00123	-.00011	.00020	.08258
400.500	1300.300	-.05148	-.01202	-.00125	-.00010	.00020	.08269

RUN NO. 35/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CEB	CA
800.420	300.170	.08283	-.03001	.00398	-.00107	.01021	.07822
800.700	400.940	-.03258	-.02005	.00001	-.00030	.00184	.07502
800.530	600.290	-.05130	-.01199	-.00122	-.00010	.00021	.08254
800.540	799.790	-.05141	-.01201	-.00123	-.00010	.00020	.08264
800.600	1000.100	-.05134	-.01200	-.00125	-.00010	.00020	.08257
800.400	1299.700	-.05138	-.01200	-.00123	-.00011	.00020	.08256

RUN NO. 36/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CEB	CA
1200.800	300.060	-.04322	-.01508	-.00097	-.00014	.00051	.07722
1200.700	400.120	-.05360	-.01139	-.00117	-.00009	.00020	.07511
1200.500	598.800	-.05164	-.01201	-.00119	-.00010	.00020	.08267
1200.700	799.690	-.05153	-.01201	-.00119	-.00010	.00020	.08264
1200.800	1000.300	-.05151	-.01201	-.00121	-.00010	.00020	.08252
1200.700	1299.600	-.05146	-.01202	-.00121	-.00010	.00020	.08262

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1A13 EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

INTENSITY ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.3000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.30 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DELTA = 41.000  
 ELEVTR = .000 ALLRON = .000  
 Y = .000

RUN NO. 40/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
-.043	299.410	.11867	-.00275	-.01590	-.00043	-.00063	.00281
.063	400.060	.08392	-.00887	-.00765	.00033	-.00269	.08766
.220	599.800	.01304	-.02317	-.00024	.00009	-.00151	.07790
.088	797.370	-.05292	-.01154	-.00129	-.00007	.00120	.07752
.149	1000.100	-.05150	-.01200	-.00125	-.00009	.00110	.08259
.248	1300.700	-.05149	-.01199	-.00127	-.00009	.00020	.08259

RUN NO. 39/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
400.200	700.150	.12038	-.01643	-.00701	.00034	-.00378	.08663
400.300	400.490	.08488	-.02475	-.00452	.00046	-.00349	.08007
400.390	800.120	-.04821	-.01368	-.00128	-.00007	.00018	.07720
400.360	799.770	-.05131	-.01201	-.00120	-.00010	.00020	.08258
400.330	999.630	-.05138	-.01202	-.00120	-.00010	.00020	.08263
400.350	1300.300	-.05133	-.01200	-.00120	-.00010	.00020	.08256

RUN NO. 38/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.950	300.400	.06278	-.02902	-.00305	.00015	-.00271	.07765
800.530	400.040	-.01826	-.02083	-.00174	-.00001	-.00022	.07535
800.310	599.000	-.05312	-.01148	-.00126	-.00010	.00020	.07649
800.470	799.810	-.05149	-.01202	-.00123	-.00011	.00020	.08263
800.570	1000.400	-.05138	-.01201	-.00120	-.00011	.00020	.08255
800.510	1299.900	-.05137	-.01200	-.00124	-.00010	.00020	.08252

RUN NO. 37/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	299.780	-.03585	-.01745	-.00131	-.00008	-.00007	.07804
1200.900	401.360	-.05272	-.01155	-.00120	-.00008	.00020	.07720
1200.800	600.290	-.05139	-.01702	-.00118	-.00010	.00020	.08261
1200.800	799.790	-.05144	-.01202	-.00120	-.00010	.00020	.08264
1200.900	1000.400	-.05142	-.01201	-.00121	-.00010	.00021	.08262
1200.800	1299.900	-.05145	-.01201	-.00118	-.00010	.00021	.08261

DATE 02 AUG 75

1A13 SOURCE DATA

1A13, EXTERNAL TANK (10) SEPARATING FROM ORB. 09

(RTJ011) (31 JUL 75)

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1089.8000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

RUN NO. 41/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
-1.876	600.520	.36699	-.03993	-.00227	-.00003	-.00033	.09731
.132	800.580	.03358	-.03527	-.00144	-.00004	.00013	.07478
-.055	999.450	-.05323	-.01136	-.00123	-.00007	.00019	.07471
-1.022	1298.400	-.05140	-.01201	-.00123	-.00009	.00020	.08266

RUN NO. 42/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
401.340	600.760	.11455	-.05218	-.00158	.00000	.00007	.07249
400.150	799.900	-.05244	-.01151	-.00124	-.00000	.00020	.07730
400.390	1000.100	-.05107	-.01196	-.00125	-.00006	.00020	.08257
400.500	1300.400	-.05112	-.01197	-.00126	-.00007	.00020	.08263

RUN NO. 43/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.910	601.380	-.04974	-.01255	-.00125	-.00005	.00020	.07855
800.480	800.020	-.05092	-.01195	-.00125	-.00006	.00020	.08248
800.600	1000.100	-.05102	-.01197	-.00126	-.00006	.00020	.08257
800.350	1299.800	-.05107	-.01197	-.00127	-.00006	.00020	.08260

RUN NO. 44/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	600.610	-.05416	-.01100	-.00128	-.00005	.00018	.07047
1200.200	799.050	-.05109	-.01197	-.00129	-.00005	.00020	.08259
1200.600	999.700	-.05115	-.01197	-.00128	-.00006	.00020	.08264
1200.800	1299.700	-.05104	-.01197	-.00130	-.00006	.00020	.08257

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTR = .000 ALLRON = .000  
 Y = .000

ORIGINAL PAGE IS  
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1A13, EXTERNAL TANK (T10) SEPARATING FROM ORB. 09

(RTJ012) ( 11 JUL 75

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 SETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVR = .000 ALLRON = .000  
 Y = 200.000

RUN NO. 48/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
-503	599.780	.28091	-.04077	.02935	-.00489	.02104	.03570
.725	800.720	.01645	-.03088	.00203	-.00061	.00506	.07570
.104	999.890	-.05342	-.01121	-.00136	-.00005	.00020	.07331
.234	1300.400	-.05121	-.01197	-.00139	-.00005	.00020	.08261

RUN NO. 47/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.530	602.380	.07630	-.04265	.00549	-.00138	.01210	.07574
400.340	800.150	-.05313	-.01128	-.00127	-.00005	.00020	.07421
400.180	999.530	-.05107	-.01196	-.00131	-.00005	.00020	.08255
400.530	1300.300	-.05113	-.01196	-.00133	-.00005	.00020	.08258

RUN NO. 46/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.210	599.530	-.05195	-.01183	-.00126	-.00005	.00020	.07935
800.210	799.130	-.05154	-.01181	-.00129	-.00006	.00020	.08137
800.620	1000.200	-.05110	-.01196	-.00131	-.00005	.00020	.08252
800.410	1299.900	-.05122	-.01198	-.00133	-.00005	.00020	.08272

RUN NO. 45/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1201.000	601.480	-.05364	-.01108	-.00126	-.00007	.00020	.07211
1200.700	800.490	-.05110	-.01197	-.00129	-.00006	.00020	.08260
1200.500	1000.300	-.05113	-.01197	-.00130	-.00005	.00020	.08265
1200.800	1300.100	-.05111	-.01197	-.00130	-.00005	.00020	.08260

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1A13 SOURCE DATA

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1A13, EXTERNAL TANK (T10) SEPARATING FROM ORB. 09

(RTJ013) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = 5.000  
ELEVTR = .000 ALLRON = .000  
Y = 200.000

RUN NO. 49/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
-706	600.830	.35088	-.04011	.01598	-.00245	.00513	.09490
.133	800.510	.03956	-.03671	.00045	-.00035	.00285	.07494
-.157	999.450	-.05292	-.01135	-.00138	-.00003	.00020	.07485
-.068	1300.000	-.05112	-.01196	-.00138	-.00005	.00021	.08259

RUN NO. 50/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
-01.230	600.710	.12622	-.05493	.00388	-.00100	.00504	.07264
400.230	800.070	-.05215	-.01156	-.00132	-.00005	.00021	.07834
400.410	1000.000	-.05098	-.01194	-.00133	-.00005	.00021	.08253
400.350	1300.300	-.05101	-.01195	-.00135	-.00006	.00021	.08252

RUN NO. 51/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.840	601.360	-.05073	-.01205	-.00130	-.00005	.00023	.08016
800.420	800.120	-.05091	-.01195	-.00133	-.00005	.00020	.08257
800.470	1000.200	-.05099	-.01195	-.00136	-.00005	.00021	.08257
800.490	1299.900	-.05102	-.01196	-.00137	-.00005	.00021	.08261

RUN NO. 52/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.600	600.760	-.05388	-.01100	-.00129	-.00008	.00020	.07063
1200.200	798.970	-.05101	-.01197	-.00137	-.00005	.00021	.08261
1200.600	999.690	-.05102	-.01196	-.00139	-.00005	.00021	.08258
1200.700	1299.900	-.05107	-.01196	-.00139	-.00005	.00021	.08262

1A13, EXTERNAL TANK (T10) SEPARATING FROM ORB. 09

ENTJ000000 31 JUL 75

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PRDIAL = 110.000  
 ALPHA = .000  
 DALPHA = -20.000  
 ELEVTR = .000 ALTCON = .000  
 Y = .000

RUN NO. 56/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
- .921	599.420	.34765	-.03956	-.01854	.00226	-.01773	.09871
.861	800.700	.03225	-.03423	-.00397	.00043	-.00236	.07561
.026	999.500	-.05300	-.01133	-.00141	-.00002	.00019	.07449
.262	1300.500	-.05092	-.01197	-.00138	-.00004	.00020	.08258

RUN NO. 55/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.550	603.180	.09906	-.04746	-.00552	.00071	-.00423	.07414
400.230	800.140	-.05261	-.01139	-.00136	-.00005	.00020	.07559
400.070	999.640	-.05102	-.01197	-.00135	-.00005	.00021	.08269
400.630	1300.300	-.05102	-.01197	-.00137	-.00005	.00021	.08262

RUN NO. 54/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.340	599.600	-.04968	-.01255	-.00141	-.00004	.00018	.07896
800.060	799.090	-.05314	-.01127	-.00138	-.00005	.00020	.07427
800.520	1000.100	-.05104	-.01195	-.00138	-.00005	.00021	.08255
800.600	1300.000	-.05101	-.01196	-.00137	-.00005	.00021	.08258

RUN NO. 53/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1201.000	601.520	-.05374	-.01104	-.00139	-.00003	.00019	.07113
1200.900	800.540	-.05095	-.01195	-.00137	-.00005	.00020	.08256
1200.800	1000.400	-.05098	-.01198	-.00138	-.00005	.00021	.08260
1200.600	1299.800	-.05097	-.01195	-.00140	-.00005	.00021	.08255

(RTJ015) ( 31 JUL 75 )

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -30.000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 57/ 0 RN/L = 6.58

X Z CN CLM CY CYN CA  
 -2.234 1297.500 -.04927 -.01258 -.00128 -.00004 .07937

RUN NO. 58/ 0 RN/L = 6.58

X Z CN CLM CY CYN CA  
 400.170 1300.300 -.05353 -.01109 -.00131 -.00004 .07140

RUN NO. 59/ 0 RN/L = 6.58

X Z CN CLM CY CYN CA  
 800.330 1300.000 -.05067 -.01196 -.00137 -.00004 .08251

RUN NO. 60/ 0 RN/L = 6.58

X Z CN CLM CY CYN CA  
 1200.400 1300.000 -.05068 -.01197 -.00140 -.00003 .08254

(RTJ016) ( 31 JUL 75 )

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 61/ 0 RN/L = 6.60

X Z CN CLM CY CYN CA  
 .228 .082 -.15719 -.01736 -.00158 -.00048 .09947

X Z CN CLM CY CYN CA  
 .177 97.977 -.12997 -.00717 -.00295 -.00096 .10550

X Z CN CLM CY CYN CA  
 .271 203.270 -.09588 -.00872 -.00355 -.00052 .09907

X Z CN CLM CY CYN CA  
 .288 304.300 -.09464 -.01894 -.00219 -.00035 .09477

X Z CN CLM CY CYN CA  
 .238 400.000 -.13478 -.01973 -.00201 -.00018 .09324

X Z CN CLM CY CYN CA  
 .116 600.600 -.15339 -.01587 -.00198 -.00039 .09376

1A13, EXTERNAL TANK(1710) SEPARATING FROM ORB. 09

(RTJ01.6) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 50. FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

MACH = 4.530 PTO1 = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = 5.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

## PARAMETRIC DATA

RUN NO. 62/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
400.460	-974	-.09646	.00208	-.00376	-.00129	.00000	.09386
400.530	100.140	-.08775	-.00526	-.00253	-.00059	.00076	.09820
400.310	199.990	-.07920	-.01793	-.00225	-.00036	.00000	.09559
400.480	300.080	-.12535	-.02102	-.00200	-.00037	.00075	.09323
400.380	398.860	-.15145	-.01666	-.00106	-.00039	.00077	.09252
400.440	600.210	-.15357	-.01591	-.00197	-.00038	.00036	.09392

RUN NO. 63/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.590	-391	-.04317	.00298	-.00373	-.00027	.00055	.09650
800.700	100.430	-.05841	-.01794	-.00227	-.00038	.00005	.09606
800.730	201.910	-.11637	-.02269	-.00207	-.00035	.00033	.09312
800.610	300.180	-.14889	-.01752	-.00197	-.00036	.00036	.09305
800.630	400.060	-.15347	-.01586	-.00194	-.00038	.00036	.09370
800.670	600.080	-.15363	-.01589	-.00196	-.00038	.00036	.09391

RUN NO. 64/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.600	.165	-.05652	-.02141	-.00248	-.00038	.00018	.09548
1200.600	97.754	-.08946	-.02695	-.00219	-.00034	.00027	.09295
1200.700	198.440	-.14184	-.01995	-.00199	-.00037	.00035	.09219
1200.900	299.180	-.15471	-.01564	-.00193	-.00040	.00036	.09071
1200.900	399.970	-.15343	-.01593	-.00197	-.00037	.00036	.09383
1200.900	599.560	-.15361	-.01593	-.00200	-.00037	.00036	.09398

DATE 02 AUG 75

IA13 SOURCE DATA

IA13.EXTERNAL TANK(10)SEPARATING FROM ORB. 09

(RTJ017) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = -5.000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = .000  
Y = .000

RUN NO. 65/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.155	1.116	-.12182	-.00622	-.00240	-.00074	.00017	.09479
.240	96.495	-.10631	-.01194	-.00276	-.00069	.00037	.10633
.234	203.120	-.08707	-.00493	-.00321	-.00064	.00011	.09826
.230	299.780	-.07645	-.01489	-.00231	-.00038	.00052	.10037
.212	401.930	-.11233	-.02115	-.00213	-.00036	.00031	.09368
.362	599.670	-.15364	-.01591	-.00200	-.00037	.00036	.09372
.410	800.290	-.15368	-.01594	-.00202	-.00037	.00036	.09392

RUN NO. 66/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.390	-1.781	-.08379	.00994	-.00421	-.00147	.00012	.10662
400.550	107.420	-.05886	-.00246	-.00293	-.00075	.00009	.09779
400.510	200.330	-.05619	-.01443	-.00297	-.00016	.00045	.09990
400.510	300.010	-.09933	-.02213	-.00212	-.00036	.00026	.09378
400.510	396.220	-.14092	-.01940	-.00203	-.00037	.00035	.09268
400.440	600.260	-.15340	-.01591	-.00202	-.00037	.00036	.09390
400.680	800.220	-.15336	-.01591	-.00203	-.00036	.00036	.09388

RUN NO. 67/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.620	.108	-.00797	.01612	-.00430	-.00052	.00041	.09477
800.540	100.450	-.02228	-.01373	-.00255	-.00033	-.00019	.09632
800.640	203.720	-.08879	-.02449	-.00219	-.00036	.00029	.09252
800.590	300.310	-.13703	-.02054	-.00205	-.00036	.00034	.09240
800.570	400.330	-.15413	-.01559	-.00201	-.00037	.00036	.09187
800.640	600.090	-.15341	-.01590	-.00206	-.00037	.00036	.09380
800.570	799.050	-.15331	-.01590	-.00205	-.00036	.00036	.09393

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## 1A13-EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ03) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1099.8000 IN. X0  
LREF = 1296.00 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = -5.000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AIRLOW = .000  
Y = .000

RUN NO. 68/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.170	10.721	-.12055	-.00775	-.00237	-.00066	.00019	.09719
.156	96.595	-.10544	-.01183	-.00232	-.00066	.00017	.10607
.176	202.980	-.08640	-.00493	-.00326	-.00061	.00011	.09911
.186	299.810	-.07581	-.01489	-.00236	-.00036	.00031	.10027
.285	402.010	-.11182	-.02117	-.00217	-.00033	.00031	.09360
.284	599.590	-.15331	-.01592	-.00209	-.00035	.00035	.09370
.377	800.430	-.15325	-.01595	-.00211	-.00034	.00035	.09384

RUN NO. 69/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.300	7.918	-.07667	.00933	-.00457	-.00136	.00011	.10472
400.500	100.450	-.05855	-.00240	-.00305	-.00072	.00009	.09769
400.540	200.180	-.05595	-.01433	-.00301	-.00014	.00047	.09980
400.490	300.050	-.09874	-.02215	-.00221	-.00033	.00026	.09378
400.480	396.310	-.14039	-.01943	-.00209	-.00034	.00035	.09188
400.460	500.230	-.15313	-.01593	-.00208	-.00034	.00035	.09381
400.630	800.060	-.15315	-.01593	-.00210	-.00034	.00035	.09382

RUN NO. 70/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.530	9.999	-.00528	.01232	-.00111	-.00037	.00048	.09548
800.570	100.330	-.02175	-.01367	-.00264	-.00030	.00019	.09605
800.570	203.820	-.08858	-.02452	-.00225	-.00033	.00029	.09258
800.620	300.340	-.13677	-.02059	-.00212	-.00034	.00034	.09237
800.520	400.390	-.15365	-.01570	-.00212	-.00035	.00035	.09169
800.690	600.030	-.15297	-.01593	-.00210	-.00034	.00035	.09373
800.780	799.870	-.15309	-.01592	-.00210	-.00034	.00035	.09378

RUN NO. 71/ 0 RN/L = 6.53

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	10.998	-.01097	-.01823	-.00267	-.00043	.00015	.09665
1200.900	100.260	-.06014	-.02843	-.00232	-.00032	.00020	.09191
1200.900	196.040	-.12091	-.02487	-.00209	-.00032	.00031	.09110
1200.900	299.550	-.15377	-.01565	-.00202	-.00034	.00035	.09096
1200.700	399.790	-.15312	-.01593	-.00201	-.00034	.00035	.09381
1200.800	599.670	-.15310	-.01591	-.00203	-.00034	.00035	.09377
1201.000	799.350	-.15302	-.01590	-.00206	-.00034	.00035	.09373

REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 JREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = .000 AIRLON = .000  
 Y = 200.000

RUN NO. 75/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.223	11.267	-.12371	-.01495	.01234	.00249	.00150	.10475
.320	103.810	-.10120	-.00912	.01960	.00641	.00149	.10508
.265	199.980	-.09464	-.00849	.01388	.00159	-.00076	.09738
.261	297.050	-.09330	-.01626	.00743	-.00137	.00135	.09770
.233	398.980	-.11332	-.02204	-.00017	-.00065	.00344	.09355
.184	598.620	-.15368	-.01569	-.00203	-.00035	.00035	.09140
.353	800.300	-.15316	-.01594	-.00209	-.00033	.00035	.09378

RUN NO. 74/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.420	9.807	-.08383	-.00358	.03015	.00936	.00171	.10017
400.480	99.905	-.08031	-.00974	.01764	.00140	.00074	.09714
400.520	199.850	-.08424	-.01626	.00945	-.00153	.00185	.09785
400.460	302.980	-.10232	-.02349	.00063	-.00079	.00457	.09382
400.420	399.680	-.14565	-.01831	-.00166	-.00043	.00061	.09225
400.500	599.700	-.15315	-.01595	-.00234	-.00034	.00034	.09378
400.510	800.100	-.15295	-.01590	-.00208	-.00034	.00035	.09368

RUN NO. 73/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.600	10.069	-.05620	-.00793	.02127	.00059	.00275	.09760
800.610	99.989	-.08321	-.01815	.01134	-.00105	.00318	.09068
800.780	200.040	-.09191	-.02553	.00128	-.00087	.00566	.09356
800.730	296.890	-.14260	-.01912	-.00149	-.00048	.00079	.09143
800.590	399.860	-.15386	-.01566	-.00200	-.00036	.00035	.09088
800.590	599.630	-.15321	-.01586	-.00200	-.00034	.00035	.09377
800.650	799.950	-.15349	-.01588	-.00198	-.00034	.00035	.09394

RUN NO. 72/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	10.057	-.00820	-.02642	.01086	-.00199	.01178	.09893
1200.800	104.520	-.06978	-.02991	.00271	-.00093	.00712	.09988
1200.700	200.470	-.13934	-.02036	-.00126	-.00051	.00101	.08979
1200.900	300.190	-.15414	-.01553	-.00206	-.00034	.00035	.08937
1200.900	400.560	-.15296	-.01589	-.00207	-.00034	.00035	.09369
1200.800	600.690	-.15308	-.01591	-.00207	-.00034	.00035	.09377
1200.900	800.010	-.15321	-.01591	-.00208	-.00034	.00035	.09383

(RTJG 0) ( 31 JUL 75 )

1A13 EXTERNAL TANK(110)SEPARATING FROM ORB. 09

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHS YPRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHS ZPRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 CALPHA = .000 DBETA = 5.000  
 ELEVTR = .000 AILRON = .000  
 Y = 200.000

RUN NO. 76/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.175	7.957	-10569	-00907	.00010	.00282	-.00120	.10351
.154	100.910	-.08685	-.00777	.01109	.00540	-.00052	.10608
.224	203.190	-.08762	-.00708	.01030	.00201	-.00035	.09747
.191	299.780	-.06462	-.01594	.00624	-.00122	.00037	.09747
.173	401.640	-.11095	-.02201	-.00061	-.00055	.00003	.09333
.270	599.640	-.15317	-.01592	-.00208	-.00034	.00035	.09366
.258	799.930	-.15302	-.01593	-.00207	-.00034	.00035	.09370

RUN NO. 77/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.236	9.443	-.06460	.00260	.02414	.01066	-.00074	.10119
400.560	100.160	-.06302	-.00819	.01428	.00212	-.00057	.09744
400.510	200.000	-.07393	-.01541	.00813	-.00127	.00140	.09784
400.450	300.050	-.09749	-.02334	.00013	-.00065	.00390	.09280
400.400	396.600	-.14240	-.01903	-.00161	-.00042	.00063	.09270
400.470	600.300	-.15333	-.01591	-.00204	-.00033	.00035	.09387
400.480	800.320	-.15318	-.01589	-.00206	-.00033	.00035	.09377

RUN NO. 78/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.370	10.134	-.03773	-.00344	.01793	.00192	.00116	.08548
800.650	100.100	-.04718	-.01734	.00994	-.00160	.00244	.09797
800.670	203.220	-.08997	-.02558	.00045	-.00066	.00430	.09333
800.770	300.330	-.14071	-.01969	-.00148	-.00046	.00116	.09151
800.730	400.440	-.15407	-.01563	-.00202	-.00034	.00035	.09090
800.720	600.050	-.15330	-.01591	-.00207	-.00033	.00035	.09384
800.570	799.850	-.15308	-.01589	-.00207	-.00033	.00035	.09374

RUN NO. 79/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	10.239	.00672	-.02590	.00913	-.00159	.01023	.09864
1200.900	99.924	-.05995	-.03000	.00246	-.00082	.00631	.09203
1201.000	199.930	-.13298	-.02216	-.00083	-.00054	.00115	.08988
1200.800	299.570	-.15429	-.01557	-.00182	-.00034	.00074	.08964
1200.800	399.990	-.15344	-.01593	-.00188	-.00033	.00034	.09391
1200.800	599.750	-.15318	-.01591	-.00184	-.00033	.00034	.09375
1201.100	799.470	-.15323	-.01591	-.00197	-.00033	.00034	.09380

DATE 02 AUG 75

1A13 SOURCE DATA

PAGE 23

(RTJ021) ( 31 JUL 75 )

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

## REFERENCE DATA

OREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1200.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = -5.000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
ELEVTR = .000 AIRRON = .000  
Y .000

RUN NO. 83/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.308	11.090	-.13115	-.01161	-.01510	-.00215	-.00261	.09708
.172	101.730	-.10706	-.01207	-.00985	-.00148	-.00162	.10730
.161	203.140	-.08778	-.00492	-.00054	-.00109	-.00033	.09934
.306	297.310	-.07565	-.01452	-.00521	-.00003	-.00066	.09953
.165	400.020	-.10953	-.02128	-.00254	-.00027	-.00042	.09360
.348	597.760	-.15415	-.01570	-.00205	-.00033	-.00035	.09166
.298	800.510	-.15305	-.01591	-.00209	-.00032	-.00034	.09375

RUN NO. 82/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.370	9.149	-.07860	.00739	-.01685	-.00366	-.00234	.10502
400.420	99.832	-.05920	-.00282	-.00877	-.00153	-.00203	.09805
400.320	199.890	-.06019	-.01357	-.00657	.00029	.00016	.09862
400.400	303.810	-.09790	-.02234	-.00273	-.00027	-.00058	.09380
400.470	399.790	-.13988	-.01955	-.00222	-.00029	.00024	.09264
400.480	599.690	-.15313	-.01592	-.00209	-.00033	.00035	.09300
400.490	800.030	-.15301	-.01590	-.00205	-.00033	.00035	.09374

RUN NO. 81/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.700	9.994	-.00848	.01157	-.01280	-.00070	-.00130	.09579
800.670	100.130	-.02132	-.01292	-.00611	.00018	-.00280	.09680
800.770	200.000	-.08363	-.02445	-.00289	-.00025	-.00071	.09257
800.530	295.820	-.13441	-.02102	-.00223	-.00027	.00017	.09222
800.630	399.690	-.15367	-.01571	-.00199	-.00033	.00035	.09178
800.730	599.650	-.15305	-.01591	-.00198	-.00033	.00034	.09372
800.660	800.010	-.15325	-.01594	-.00201	-.00033	.00035	.09386

RUN NO. 80/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	9.726	-.00882	-.01790	-.00528	-.00011	-.00284	.09691
1200.700	103.890	-.05101	-.02877	-.00338	-.00019	-.00127	.09195
1200.800	200.520	-.12394	-.02427	-.00243	-.00023	.00003	.09911
1200.700	300.370	-.15402	-.01564	-.00201	-.00033	.00035	.09086
1200.900	400.540	-.15332	-.01594	-.00202	-.00033	.00035	.09390
1200.900	600.760	-.15320	-.01592	-.00202	-.00033	.00034	.09381
1201.000	800.050	-.15321	-.01591	-.00200	-.00033	.00034	.09380

1A13, EXTERNAL TANK(110) SEPARATING FROM ORB. 09

(RTJ032) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -5.000 DPBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 84/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.089	199.410	-.01788	-.00564	-.00378	-.00081	.00039	.10633
.226	299.790	-.04871	-.01231	-.00258	-.00039	.00019	.09729
.222	400.170	-.07382	-.02180	-.00238	-.00030	.00012	.09288
.189	599.670	-.15257	-.01607	-.00212	-.00032	.00035	.09217
.240	800.190	-.15311	-.01590	-.00213	-.00031	.00035	.09376
.412	999.680	-.15325	-.01590	-.00213	-.00032	.00035	.09382
1.532	1299.500	-.15337	-.01591	-.00212	-.00032	.00035	.09390

RUN NO. 85/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.520	199.060	-.01398	-.01211	-.00261	-.00048	.00031	.09745
400.660	299.770	-.05674	-.02288	-.00231	-.00030	.00011	.09399
400.480	400.240	-.12131	-.02239	-.00209	-.00030	.00034	.09112
400.340	598.560	-.15401	-.01565	-.00199	-.00034	.00035	.09133
400.480	800.440	-.15317	-.01590	-.00207	-.00031	.00035	.09376
400.420	999.770	-.15323	-.01590	-.00208	-.00032	.00035	.09380
400.610	1300.400	-.15320	-.01590	-.00209	-.00031	.00035	.09378

RUN NO. 86/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.490	200.590	-.03636	-.02585	-.00240	-.00031	.00023	.09092
800.630	301.090	-.11508	-.02425	-.00219	-.00029	.00034	.08966
800.660	400.290	-.15037	-.01697	-.00212	-.00031	.00035	.09289
800.750	600.480	-.15316	-.01589	-.00211	-.00031	.00035	.09377
800.760	800.220	-.15311	-.01590	-.00211	-.00031	.00035	.09377
800.690	999.500	-.15335	-.01591	-.00213	-.00032	.00035	.09389
800.910	1300.000	-.15320	-.01591	-.00211	-.00031	.00035	.09381

RUN NO. 87/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	200.090	-.09366	-.02969	-.00221	-.00027	.00029	.08925
1200.800	299.120	-.15426	-.01706	-.00204	-.00031	.00035	.09234
1200.900	400.100	-.15431	-.01556	-.00199	-.00034	.00035	.09018
1200.900	599.970	-.15322	-.01590	-.00206	-.00031	.00034	.09176
1200.800	799.020	-.15342	-.01592	-.00208	-.00031	.00035	.09190
1200.900	999.870	-.15319	-.01589	-.00210	-.00031	.00035	.09174
1201.100	1300.000	-.15339	-.01591	-.00214	-.00031	.00035	.09385

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = 0.100

RUN NO. 88/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.023	300.670	.12218	-.01378	-.00433	-.00035	-.00003	.10435
.012	399.860	.02460	-.02804	-.00259	-.00026	.00038	.09881
.128	599.530	-.14117	-.01955	-.00211	-.00031	.00034	.08789
.244	800.180	-.15301	-.01589	-.00213	-.00031	.00034	.09370
.218	999.800	-.15308	-.01588	-.00213	-.00031	.00035	.09377
.170	1292.600	-.15327	-.01590	-.00213	-.00031	.00035	.09383

RUN NO. 89/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.600	299.860	.05880	-.03402	-.00287	-.00019	.00002	.09511
400.690	399.690	-.07059	-.02994	-.00220	-.00028	.00030	.09805
400.330	596.410	-.11540	-.01555	-.00205	-.00030	.00034	.08921
400.560	800.110	-.11539	-.01590	-.00207	-.00030	.00034	.09381
400.440	999.850	-.11536	-.01589	-.00211	-.00030	.00034	.09376
400.630	1300.500	-.11530	-.01591	-.00210	-.00030	.00034	.09385

RUN NO. 90/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.730	303.670	-.06598	-.03211	-.00229	-.00027	.00028	.08619
800.610	399.990	-.11742	-.02071	-.00213	-.00029	.00033	.08097
800.860	600.880	-.11528	-.01588	-.00213	-.00030	.00034	.09372
800.720	800.150	-.11531	-.01590	-.00215	-.00030	.00034	.09389
800.670	999.550	-.11528	-.01589	-.00213	-.00030	.00034	.09375
800.900	1300.000	-.11529	-.01589	-.00213	-.00030	.00034	.09375

RUN NO. 91/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.500	295.790	-.113154	-.02706	-.00212	-.00029	.00032	.08917
1201.000	401.030	-.115481	-.01538	-.00207	-.00030	.00034	.08619
1202.800	600.230	-.115319	-.01590	-.00211	-.00030	.00034	.09382
1203.800	799.430	-.115292	-.01588	-.00213	-.00030	.00034	.09357
1200.850	999.400	-.115304	-.01590	-.00213	-.00030	.00034	.09377
1201.300	1300.600	-.115315	-.01591	-.00213	-.00030	.00034	.09386

PARAMETRIC DATA  
 MACH = 4.530 PTOTAL = 1110.000  
 ALPHA = -5.000 BETA = .000  
 ALPHA = -10.000 DBETA = .000  
 ELEVTR = .000 AIRLON = .000  
 Y = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. Z0  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOVAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -10.000 CDETA = .000  
 ELEVR = .000 AIRCRM = .000  
 Y = 200.000

RUN NO. 95/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.025	299.840	.06404	-.02118	.03377	-.00121	.01216	.10499
.281	399.650	-.01469	-.02837	.01388	-.00263	.00723	.09653
.281	600.320	-.14674	-.01787	-.00179	-.00037	.00055	.08600
.288	800.410	-.15275	-.01589	-.00215	-.00029	.00034	.09365
.337	999.940	-.15298	-.01592	-.00219	-.00030	.00034	.09376
.324	1300.200	-.15268	-.01589	-.00222	-.00030	.00034	.09361

RUN NO. 94/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.340	300.380	-.00448	-.02985	.01480	-.00271	.00836	.03468
400.580	403.020	-.08523	-.02808	.00116	-.00085	.00564	.08878
400.370	599.890	-.15388	-.01348	-.00217	-.00030	.00034	.08886
400.580	800.320	-.15263	-.01586	-.00223	-.00030	.00034	.09359
400.450	999.700	-.15281	-.01587	-.00221	-.00030	.00034	.09368
400.490	1299.800	-.15267	-.01587	-.00218	-.00030	.00034	.09361

RUN NO. 93/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.970	303.160	-.08318	-.03022	.00139	-.00082	.00560	.08660
800.550	397.380	-.14584	-.01822	-.00165	-.00041	.00066	.08401
800.580	599.580	-.15306	-.01591	-.00214	-.00030	.00034	.09381
800.550	799.470	-.15280	-.01589	-.00217	-.00030	.00034	.09367
800.600	999.790	-.15308	-.01591	-.00220	-.00030	.00034	.09391
800.750	1300.700	-.15273	-.01588	-.00220	-.00030	.00034	.09363

RUN NO. 92/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	299.050	-.14749	-.01793	-.00185	-.00034	.00061	.08638
1200.800	400.220	-.15446	-.01538	-.00211	-.00030	.00034	.08669
1201.100	601.050	-.15275	-.01589	-.00215	-.00030	.00034	.09366
1201.000	800.990	-.15300	-.01591	-.00218	-.00030	.00034	.09380
1200.800	999.640	-.15291	-.01589	-.00214	-.00030	.00034	.09374
1200.920	1299.900	-.15298	-.01589	-.00215	-.00030	.00034	.09378

DATE 02 AUG 75 1A13 SOURCE DATA

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09 (RTJ225) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = -5.100 BETA = .000  
DALPHA = -10.000 DBETA = 5.000  
ELEVTR = .000 AILRON = .000  
Y = 200.000

RUN NO. 96/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
-.076	300.720	.11719	-.01719	.02022	.00120	.00224	.10447
.073	400.210	.01705	-.02988	.00992	-.00186	.00347	.09668
.146	599.430	-.14296	-.01883	-.00187	-.00037	.00058	.08524
.292	800.130	-.15273	-.01588	-.00226	-.00029	.00034	.09365
.215	999.590	-.15268	-.01587	-.00224	-.00029	.00034	.09360
.149	1300.000	-.15263	-.01587	-.00224	-.00029	.00034	.09356

RUN NO. 97/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.690	299.500	.03586	-.03513	.01157	-.00204	.00557	.09566
400.630	399.800	-.06950	-.03139	.00068	-.00070	.00472	.08912
400.400	596.750	-.15457	-.01547	-.00204	-.00030	.00034	.08797
400.520	800.210	-.15293	-.01588	-.00209	-.00030	.00034	.09369
400.440	999.780	-.15274	-.01588	-.00215	-.00030	.00034	.09359
400.720	1300.500	-.15269	-.01586	-.00217	-.00029	.00034	.09356

RUN NO. 98/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.560	302.970	.07097	-.03247	.00082	-.00071	.00463	.08609
800.630	400.170	-.14231	-.01924	-.00167	-.00040	.00070	.08497
800.900	600.810	-.15274	-.01587	-.00217	-.00033	.00034	.09365
800.740	800.200	.15266	-.01588	-.00222	-.00030	.00034	.09371
800.500	999.450	-.15271	-.01597	-.00218	-.00030	.00034	.09362
800.820	1300.100	-.15278	-.01587	-.00219	-.00030	.00034	.09364

RUN NO. 99/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.500	296.360	-.14221	-.01972	-.00161	-.00037	.00074	.08583
1200.900	401.220	-.15462	-.01529	-.00204	-.00031	.00033	.08534
1200.800	600.300	-.15277	-.01586	-.00215	-.00029	.00034	.09362
1200.800	799.340	-.15292	-.01587	-.00216	-.00030	.00034	.09365
1200.800	999.420	-.15279	-.01587	-.00216	-.00029	.00034	.09364
1201.100	1300.700	-.15301	-.01590	-.00222	-.00030	.00034	.09377



## IA13.EXTERNAL TANK(10)SEPARATING FROM ORB. 09

(RTJUL 5) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 P10TAL = 110.000  
 ALPHA = -5.000 BLTA = .000  
 DALPHA = -10.000 DMETA = 5.000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 103/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
.074	300.060	.09965	-.01423	-.02303	.00091	.01032	.10949
.410	399.880	.02038	-.02710	-.00948	.00080	-.00375	.03776
.415	600.420	-.14076	-.01955	-.00233	-.00025	.00023	.08555
.225	800.520	-.15297	-.01587	-.00216	-.00029	.00034	.09374
.175	999.830	-.15300	-.01588	-.00220	-.00029	.00034	.09373
.454	1300.400	-.15287	-.01587	-.00224	-.00029	.00034	.09368

RUN NO. 102/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
400.230	300.710	.04471	-.03027	-.01048	.00115	-.00470	.09539
400.550	403.910	-.07157	-.02923	-.00339	-.00014	-.00112	.08839
400.690	600.080	-.15402	-.01552	-.00225	-.00029	.00034	.09922
400.600	800.250	-.15250	-.01584	-.00224	-.00029	.00034	.09349
400.420	999.420	-.15275	-.01587	-.00222	-.00029	.00034	.09365
400.440	1300.000	-.15304	-.01589	-.00223	-.00029	.00034	.09379

RUN NO. 101/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.780	304.750	-.06385	-.03216	-.00348	-.00011	-.01005	.08640
800.410	396.210	-.13629	-.02097	-.00241	-.00024	.00021	.08952
800.640	599.810	-.15290	-.01587	-.00218	-.00029	.00034	.09365
800.570	799.300	-.15288	-.01587	-.00219	-.00029	.00034	.09364
800.760	999.880	-.15289	-.01587	-.00219	-.00029	.00034	.09367
800.790	1300.700	-.15288	-.01587	-.00221	-.00029	.00034	.09368

RUN NO. 100/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	300.250	-.13230	-.02273	-.00237	-.00026	.00016	.08859
1200.700	399.450	-.15460	-.01535	-.00219	-.00030	.00034	.08612
1201.000	600.100	-.15269	-.01587	-.00224	-.00029	.00034	.09361
1201.000	800.910	-.15270	-.01586	-.00223	-.00030	.00034	.09362
1200.900	999.490	-.15274	-.01588	-.00222	-.00029	.00034	.09362
1200.960	1300.000	-.15255	-.01585	-.00221	-.00030	.00034	.09355

DATE 02 AUG 75 1A13 SOURCE DATA

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ027) 1 31 JUL 75

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES THRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 104/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
-1.133	600.970	.30227	-.04692	-.00397	-.00015	-.00143	.10097
.422	800.750	-.04359	-.00248	-.00021		.00028	.08283
.252	999.950	-.15458	-.01531	-.00223	-.00029	.00034	.08549
-1.123	1298.100	-.15266	-.01585	-.00226	-.00029	.00034	.09361

RUN NO. 105/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
401.620	601.370	.03534	-.06189	-.00254	-.00019	.00011	.08229
400.240	797.470	-.15374	-.01564	-.00217	-.00027	.00034	.09023
400.080	999.300	-.15280	-.01592	-.00216	-.00027	.00034	.09380
400.710	1300.600	-.15274	-.01592	-.00220	-.00027	.00034	.09376

RUN NO. 106/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.510	600.640	-.15068	-.01677	-.00222	-.00028	.00035	.08964
801.010	801.460	-.15311	-.01522	-.00217	-.00030	.00033	.08322
800.410	999.640	-.15264	-.01592	-.00223	-.00028	.00034	.09378
800.440	1299.900	-.15274	-.01592	-.00223	-.00028	.00034	.09379

RUN NO. 107/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.400	599.740	-.15499	-.01518	-.00217	-.00029	.00033	.08213
1200.800	800.370	-.15275	-.01593	-.00220	-.00027	.00034	.09382
1200.500	999.260	-.15263	-.01592	-.00222	-.00028	.00034	.09378
1201.000	1300.300	-.15269	-.01592	-.00225	-.00027	.00034	.09378

## 1A13 EXTERNAL TANK (110) SEPARATING FROM ORB. 09

(RTJF.8) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTX = .000 ATLON = .000  
 Y = 200.000

RUN NO. 111/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
-562	599.650	.21721	-.04774	.02913	-.00517	.02623	.10579
1.022	901.150	-.08271	-.03581	.00149	-.00087	.00427	.08194
.177	1000.100	-.15517	-.01535	-.00217	-.00039	.00033	.08447
.218	1300.100	-.15304	-.01600	-.00232	-.00027	.00034	.09402

RUN NO. 110/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
400.610	602.930	-.01841	-.04819	.00525	-.00127	.00033	.09147
400.570	800.680	-.15430	-.01547	-.00225	-.00028	.00034	.08627
400.330	999.730	-.15239	-.01597	-.00237	-.00027	.00034	.09372
400.300	1300.000	-.15265	-.01598	-.00243	-.00027	.00035	.09378

RUN NO. 109/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.600	600.400	-.15386	-.01561	-.00232	-.00027	.00035	.08976
800.520	800.260	-.15441	-.01542	-.00235	-.00028	.00035	.08665
800.150	998.900	-.15259	-.01596	-.00236	-.00027	.00034	.09372
800.870	1300.600	-.15260	-.01596	-.00239	-.00028	.00035	.09371

RUN NO. 108/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	600.110	-.15462	-.01524	-.00220	-.00023	.00033	.08360
1201.200	801.380	-.15252	-.01591	-.00230	-.00027	.00034	.09375
1200.800	999.940	-.15244	-.01590	-.00229	-.00028	.00034	.09367
1200.900	1300.200	-.15263	-.01592	-.00228	-.00027	.00034	.09380

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -20.000 DBETA = 5.000  
 ELEVTR = .000 AILRON = .000  
 Y = 200.000

RUN NO. 112/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
-1.217	599.830	.28198	-.04605	.01297	-.00262	.01289	.10404
.309	800.720	-.04716	-.04393	-.00074	-.00057	.00189	.08375
.126	999.730	-.15469	-.01538	-.00229	-.00028	.00034	.08537
.112	1300.000	-.15272	-.01595	-.00234	-.00027	.00035	.09384

RUN NO. 113/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
401.690	601.560	.02847	-.06014	.00208	-.00096	.00573	.08199
400.090	797.630	-.15290	-.01556	-.00218	-.00027	.00034	.08983
400.000	999.240	-.15173	-.01589	-.00220	-.00027	.00033	.09358
400.710	1300.400	-.15169	-.01595	-.00224	-.00028	.00034	.09352

RUN NO. 114/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.780	600.740	-.15177	-.01584	-.00219	-.00027	.00035	.09040
801.100	801.400	-.15376	-.01517	-.00221	-.00029	.00033	.08303
400.700	999.700	-.15175	-.01589	-.00220	-.00027	.00034	.09362
800.650	1300.100	-.15181	-.01599	-.00227	-.00028	.00034	.09363

RUN NO. 115/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.500	599.840	-.15370	-.01511	-.00228	-.00029	.00033	.08156
1200.700	800.150	-.15161	-.01588	-.00232	-.00028	.00034	.09356
1200.700	999.300	-.15157	-.01588	-.00230	-.00028	.00034	.09353
1201.000	1300.300	-.15164	-.01588	-.00231	-.00028	.00034	.09357

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## IA13 SOURCE DATA

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IA13 EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

IR(TJ070) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2680.000 SQ.FT. XMRP = 1088.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 RREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 P/DOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 D/ALPHA = -20.000 L/BETA = 5.000  
 ELEVTR = .000 ALT/EN = .000  
 Y = .000

RUN NO. 119/ 0 RN/L = 8.57

X	Z	CN	CLM	CY	CYN	CBL	CA
-817	599.570	.27576	-.04733	-.02498	.00291	-.02450	.10268
1165	901.480	-.06382	-.04022	-.00583	.00035	-.00030	.09439
1245	1000.100	-.15422	-.01527	-.00224	-.00026	.00000	.08415
1220	1300.200	-.15210	-.01590	-.00225	-.00026	.00000	.09371

RUN NO. 113/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.440	602.950	.06695	-.05434	-.00778	.00063	-.00642	.08239
400.510	100.000	-.15284	-.01550	-.00225	-.00028	.00014	.08857
400.270	1000.100	.07159	-.01586	-.00225	-.00027	.00034	.09356
400.410	1300.200	.15139	-.01589	-.00225	-.00027	.00034	.09364

RUN NO. 117/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.430	600.380	-.15175	-.01584	-.00222	-.00027	.00033	.09073
800.410	800.410	-.15394	-.01518	-.00214	-.00028	.00033	.06420
800.170	998.960	-.15180	-.01587	-.00216	-.00027	.00033	.09360
800.910	1301.000	-.15201	-.01588	-.00220	-.00027	.00034	.09369

RUN NO. 116/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	600.340	-.15401	-.01511	-.00226	-.00028	.00033	.08164
1201.100	801.340	-.15159	-.01586	-.00229	-.00027	.00034	.09353
1200.800	1000.100	-.15147	-.01586	-.00231	-.00027	.00034	.09345
1200.700	1300.000	-.15176	-.01589	-.00231	-.00028	.00034	.09361

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IA13 SOURCE DATA

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IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ031) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.00  
 ALP.A = -5.000 BETA = .000  
 DALPHA = -30.000 DBETA = 5.000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 120/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
-3.671	1297.400	-1.15060	-0.01628	-0.00221	-0.00026	.00034	.09095

RUN NO. 121/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
400.390	1300.300	-1.15388	-0.01519	-0.00214	-0.00027	.00032	.08369

RUN NO. 122/ 0 RN/L = 6.56

X	Z	CN	CLM	CY	CYN	CBL	CA
800.330	1300.000	-1.15161	-0.01586	-0.00223	-0.00025	.00033	.09355

RUN NO. 123/ 0 RN/L = 6.56

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	1300.600	-1.15163	-0.01586	-0.00224	-0.00025	.00033	.09358

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ032) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = 10.000 BETA = .000  
 DALPHA = 5.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 124/ 0 RN/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
.290	10.180	-1.20762	-0.02034	-0.00323	-0.00050	.00054	.11788
.263	102.520	-1.18865	-0.00836	-0.00372	-0.00080	.00028	.10952
.327	203.430	-1.18504	-0.01761	-0.00217	-0.00022	.00013	.10349
.320	300.630	-1.21724	-0.02213	-0.00181	-0.00025	.00039	.10179
.436	399.980	-1.23745	-0.02008	-0.00180	-0.00026	.00038	.10132
.307	600.380	-1.23974	-0.01936	-0.00182	-0.00025	.00038	.10291

1A13,EXTERNAL TANK(110)SEPA TING FROM CRB. 09

(RTJ0002) ( 31 JUL 75 )

## REFERENCE DATA

SPEF = 2690.0000 SQ.FT. XHRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YHRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZHRP = 400.0000 IN. Z0  
SCALE = .010%

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -10.000 BETA = .000  
DALPHA = 5.000 DBLTA = .000  
ELEVTR = .000 AILRON = .000  
Y = .000

RUN NO. 125/ 0 RN/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
400.490	9.769	-1.6207	-.00105	-.00424	-.00107	.00045	.11037
400.540	100.150	-1.16036	-.01320	-.00271	-.00010	.00032	.10090
400.530	200.050	-1.19696	-.02167	-.00184	-.00026	.00038	.10221
400.560	297.560	-.22769	-.02214	-.00181	-.00025	.00079	.10109
400.610	399.770	-.23980	-.01924	-.00181	-.00025	.00037	.10150
400.550	600.050	-.23977	-.01934	-.00181	-.00024	.00042	.10294

RUN NO. 126/ 0 RN/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
800.660	9.930	-.12696	-.00333	-.00450	-.00020	-.00044	.10811
800.580	100.290	-.115568	-.01898	-.00208	-.00030	.00047	.10388
800.710	200.580	-.21128	-.02465	-.00188	-.00023	.00037	.10114
800.3	299.980	-.23865	-.01970	-.00183	-.00024	.00037	.10135
800.700	400.700	-.23983	-.0335	-.00183	-.00024	.00037	.10244
800.830	600.060	-.23969	-.01934	-.00183	-.00024	.00038	.10289

RUN NO. 127/ 0 RN/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	10.888	-.115784	-.02180	-.00293	-.00047	.00034	.10340
1200.800	99.230	-.18404	-.02806	-.00200	-.00022	.00031	.10138
1200.600	201.740	-.22542	-.02385	-.00186	-.00021	.00033	.10071
1201.000	301.060	-.24003	-.01907	-.00186	-.00024	.00037	.09977
1200.900	399.900	-.23956	-.01932	-.00186	-.00024	.00077	.10288
1201.000	599.750	-.23939	-.01933	-.00188	-.00023	.00037	.10280

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1A13 SOURCE DATA

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(RT-033) ( 31 JUL 75 )

1A13 EXTERNAL TANK (110) SEPARATING FROM ORB. 09

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTX = .000 AILRON = .000  
 Y = .000

RUN NO. 128/ 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CBL	CA
.248	8.036	-1.17660	-0.1145	-0.00401	-0.00085	.00036	.12198
.163	102.990	-1.14759	-0.0987	-0.0434	-0.0095	.00017	.11675
.286	199.960	-1.15261	-0.1401	-0.0267	-0.0028	.00054	.10734
.285	302.260	-1.19704	-0.2144	-0.0185	-0.0026	.00036	.10084
.373	399.960	-1.2712	-0.2198	-0.0181	-0.0025	.00037	.10049
.457	600.160	-1.23957	-0.1935	-0.0183	-0.0024	.00037	.10285
.467	799.730	-1.23925	-0.1932	-0.0186	-0.0024	.00037	.10272
.487	1000.300	-1.23952	-0.1935	-0.0190	-0.0024	.00037	.10284

RUN NO. 129/ 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CBL	CA
400.440	9.364	-1.13007	.00851	-0.00506	-0.00163	-0.00006	.11718
400.460	100.200	.12861	-0.0805	-0.0307	-0.0041	.00052	.10990
400.680	200.270	.16537	-0.2063	-0.0200	-0.0025	.00023	.10222
400.540	300.150	-1.21158	-0.2370	-0.0192	-0.0024	.00030	.10043
400.550	398.990	.23695	-0.2002	-0.0189	-0.0025	.00037	.10095
400.600	599.870	-1.23964	-0.1934	-0.0190	-0.0024	.00038	.10292
400.600	800.030	-1.23932	-0.1931	-0.0193	-0.0023	.00037	.10277
400.600	1000.300	-1.23920	-0.1932	-0.0191	-0.0023	.00037	.10274

RUN NO. 130/ 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CBL	CA
800.560	9.794	-1.08725	.00436	-0.00261	-0.00033	.00051	.10777
800.620	100.300	-1.11705	-0.1493	-0.0199	-0.0028	.00010	.10556
800.550	202.060	-1.18061	-0.2693	-0.0201	-0.0022	.00039	.10147
800.660	299.920	-1.22849	-0.2265	-0.0193	-0.0023	.00036	.10106
800.710	400.510	-1.24013	-0.1917	-0.0191	-0.0024	.00037	.10053
800.760	600.630	-1.23945	-0.1933	-0.0191	-0.0023	.00037	.10281
800.870	799.820	-1.23955	-0.1932	-0.0193	-0.0023	.00037	.10284
800.810	1000.000	-1.23931	-0.1932	-0.0190	-0.0023	.00037	.10275

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1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 08

(RTJ033) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEV R = .000 AILRON = .000  
 Y = .000

RUN NO. 131/ 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CBL	CA
1201.000	11.115	-.12813	-.02032	-.00184	-.00032	.00119	.12236
1201.000	99.104	-.15561	-.02857	-.00213	-.00026	.00111	.11441
1200.900	199.820	-.20440	-.02828	-.00204	-.00021	.00114	.10549
1200.900	302.170	-.23958	-.01919	-.00195	-.00022	.00131	.10150
1200.900	400.210	-.23893	-.01930	-.00191	-.00022	.00137	.10073
1201.000	600.100	-.23913	-.01931	-.00193	-.00022	.00137	.10279
1201.000	799.370	-.23908	-.01930	-.00194	-.00023	.00137	.10288
1201.000	1000.300	-.23957	-.01933	-.00192	-.00022	.00137	.10293

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ034) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEV R = .000 AILRON = .000  
 Y = 200.000

RUN NO. 135/ 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CBL	CA
.210	10.547	-.18472	-.01695	.03028	.00558	.00218	.12236
.345	101.800	-.16616	-.01242	.03406	.00583	.00170	.11441
.330	200.010	-.18028	-.01681	.00989	-.00121	.00110	.10549
.282	296.990	-.19956	-.02296	-.00052	-.00038	.00226	.10150
.314	398.450	-.23175	-.02121	-.00185	-.00026	.00052	.10073
.325	600.150	-.23933	-.01930	-.00196	-.00022	.00037	.10279
.385	799.740	-.23961	-.01932	-.00194	-.00022	.00037	.10288
.495	1000.200	-.23990	-.01932	-.00195	-.00022	.00037	.10293

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IA13 SOURCE DATA

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IA13 EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ034) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SC T. XMRP = 1089.8000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = .000 AIRRON = .000  
 Y = 200.000

RUN NO. 134/ 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CBL	CA
400.460	9.977	-15401	-00818	.04649	.00732	.00283	.11297
400.550	99.931	-15801	-01584	.01781	-.00071	.00208	.10728
400.540	203.310	-17813	-.02279	.00347	-.00110	.00304	.10501
400.650	300.650	-.22038	-.02311	-.00155	-.00028	.00094	.10098
400.500	400.320	-.23988	-.01938	-.00186	-.00024	.00039	.10170
400.610	600.200	-.23953	-.01933	-.00187	-.00023	.00037	.10287
400.670	799.810	-.24003	-.01934	-.00192	-.00022	.00037	.10301
400.740	1000.100	-.23992	-.01931	-.00191	-.00023	.00037	.10290

RUN NO. 133/ 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CBL	CA
800.610	10.232	-13518	-.01158	.02462	.00018	.00288	.10866
800.590	100.200	-14439	-.02268	.00901	-.00090	.00367	.10872
800.790	200.230	-.20047	-.02608	-.00082	-.00035	.00187	.10115
800.710	299.940	-.23442	-.02102	-.00182	-.00025	.00057	.10141
800.810	400.130	-.23947	-.01920	-.00193	-.00023	.00037	.10131
800.800	599.470	-.23975	-.01932	-.00194	-.00023	.00037	.10291
800.830	799.860	-.23992	-.01934	-.00194	-.00023	.00037	.10299
800.730	1000.300	-.23992	-.01932	-.00191	-.00023	.00037	.10295

RUN NO. 132/ 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	14.395	-11607	-.02588	.00704	-.00104	.00909	.10671
1200.900	101.350	-16597	-.02982	.00172	-.00049	.00429	.10157
1200.900	199.190	-.21924	-.02516	-.00130	-.00033	.00125	.10023
1200.800	300.280	-.23979	-.01917	-.00190	-.00024	.00037	.10081
1201.000	400.600	-.23932	-.01931	-.00193	-.00022	.00037	.10277
1200.900	600.940	-.23938	-.01931	-.00192	-.00022	.00037	.10280
1201.100	800.020	-.23979	-.01934	-.00191	-.00022	.00037	.10294
1201.200	1000.100	-.23939	-.01931	-.00193	-.00022	.00037	.10278

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1A13 SOURCE DATA

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1A13, EXTERNAL TANK (T10) SEPARATING FROM ORB. 09

PTJ0351 (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. YMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

## RAINFALL DATA

MAC4 = 4.520 PTCAL = 80.000  
 ALPHA = 10.000 GETA = .000  
 DALPHA = .000 GBLTA = 5.000  
 ELEVTR = .000 AGRON = .000  
 Y = .00.000

RUN NO. 136/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
.154	9.483	-1.16295	-0.01102	.02382	.00551	-0.00112	.112309
.245	99.825	-1.14807	-0.00974	.02769	.03657	.00331	.11654
.317	203.730	-1.16888	-0.01664	.00851	-0.01033	.00043	.10595
.393	302.120	-1.19568	-0.02285	-0.00095	-0.00028	.00172	.10139
.323	400.000	-1.22985	-0.02153	-0.00185	-0.00025	.00063	.10041
.326	600.220	-1.23974	-0.01931	-0.00198	-0.00022	.00047	.10288
.415	799.860	-1.23947	-0.01928	-0.00199	-0.00022	.00041	.10277
.453	1000.100	-1.23937	-0.01930	-0.00193	-0.00022	.00037	.10275

RUN NO. 137/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.360	3.530	-1.13189	-0.00220	.03918	.00931	.00457	.11491
400.500	100.170	-1.14043	-0.01396	.01484	-0.00004	.00686	.10685
400.460	200.210	-1.16711	-0.02310	.00275	-0.00087	.00334	.10402
400.460	296.400	-1.21592	-0.02351	-0.00164	-0.00027	.00078	.10059
400.440	399.370	-1.23590	-0.01559	-0.00196	-0.00024	.00042	.10143
400.510	593.920	-1.23954	-0.01930	.00202	-0.00022	.00038	.10292
400.620	799.920	-1.23946	-0.01930	.00201	-0.00021	.00037	.10282
400.660	1000.400	-1.23960	-0.01929	-0.00198	-0.00021	.00037	.10285

RUN NO. 138/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
800.550	9.992	-1.12097	-0.00744	.01957	.00075	.00113	.10840
800.730	100.130	-1.12810	-0.02151	.00743	-0.00143	.00357	.10785
800.530	201.130	-1.19247	-0.02701	.00099	-0.00031	.00152	.10105
800.610	299.940	-1.23198	-0.02151	-0.00196	-0.00023	.00054	.10110
800.830	493.490	-1.23935	-0.01914	-0.00195	-0.00022	.00037	.10082
800.820	600.570	-1.23921	-0.01928	-0.00198	-0.00021	.00037	.10269
800.720	799.790	-1.23992	-0.01933	-0.00197	-0.00022	.00037	.10301
800.860	1000.100	-1.23967	-0.01931	-0.00197	-0.00022	.00037	.10297

1A13, EXTERNAL TANK (T10) SEPARATING FROM ORB. 09

(RTJ035) ( 31 JUL 75 )

REFERENCE DATA

S-LF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = .000 DBETA = 5.000  
 ELEVR = .000 AILRON = .000  
 Y = 200.000

RUN NO. 139 / 0 RN/L = 4.81

Y	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	10.995	-1.1348	-.02442	.00515	-.00083	.00741	.10647
1201.100	97.096	-.15607	-.02934	.00140	-.00033	.00728	.10158
1201.000	198.150	-.21264	-.02653	-.00128	-.00026	.00131	.10000
1200.800	301.270	-.23967	-.01917	-.00201	-.00024	.00038	.10112
1200.900	400.220	-.23912	-.01928	-.00201	-.00022	.00037	.10273
1201.000	600.000	-.23958	-.01930	-.00204	-.00021	.00037	.10285
1201.100	799.490	-.23972	-.01931	-.00202	-.00021	.00037	.10291
1201.200	1000.300	-.23963	-.01930	-.00202	-.00021	.00037	.10285

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = .000 DBETA = 5.000  
 ELEVR = .000 AILRON = .000  
 Y = .000

1A17, EXTERNAL TANK (T10) SEPARATING FROM ORB. 09

(RTJ036) ( 31 JUL 75 )

RUN NO. 14 / 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1237	11.180	-.18689	-.01574	-.02395	-.00268	-.00206	.12212
1181	103.510	-.15107	-.01068	-.01501	-.00236	-.00237	.11689
1263	197.24	-.23922	-.01364	-.00632	-.00007	.00059	.10774
1356	300.150	-.19611	-.02157	-.00230	-.00021	.00002	.10150
1341	397.860	-.22705	-.02193	-.00207	-.00020	.00033	.10059
1274	600.020	-.23925	-.01930	-.00202	-.00021	.00037	.10279
1444	799.960	-.23961	-.01929	-.00200	-.00020	.00037	.10288
1471	1000.300	-.23958	-.01930	-.00201	-.00020	.00037	.10289

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IA13 SOURCE DATA

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IA13 EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(01/01/75) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SC.FT. XJRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.500 PTOTAL = 80.000  
 ALPHA = 10.000 BETA = 0.0  
 DELTA = 0.000 CURTA = 0.000  
 ELEVTR = .000 ALTORN = .000  
 Y = .000

RUN NO. 142/ RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.480	9.873	-1.13108	.00653	-.02225	-.00485	-.00103	.11748
400.450	100.000	-.12961	-.00851	-.00900	-.00057	-.00034	.10592
400.480	200.120	-.116464	-.02053	-.00312	-.00021	-.00010	.10265
400.510	301.270	-.21086	-.02372	-.00213	-.00019	-.00005	.10961
400.550	400.470	-.23681	-.02006	-.00197	-.00022	-.00005	.10330
400.610	500.220	-.23350	-.01929	-.00201	-.00020	-.00003	.10245
400.650	599.730	-.23930	-.01928	-.00199	-.00021	-.00037	.10275
400.580	1000.200	-.23941	-.01929	-.00201	-.00020	-.00137	.10280

RUN NO. 141/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
800.510	9.302	-.09196	.00463	-.00080	-.00066	-.00103	.10900
800.540	99.838	-.11556	-.01491	-.00447	-.00008	-.00102	.10594
800.700	200.150	-.118034	-.02682	-.00251	-.00015	-.00002	.10156
800.680	298.020	-.22771	-.02253	-.00226	-.00019	-.00009	.10086
800.660	400.230	-.23995	-.01912	-.00196	-.00022	-.00003	.10349
800.790	599.310	-.23920	-.01929	-.00198	-.00021	-.00037	.10275
800.790	799.740	-.23942	-.01928	-.00201	-.00021	-.00137	.10279
800.790	1000.500	-.23967	-.01932	-.00200	-.00021	-.00037	.10289

RUN NO. 143/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	10.778	-.12668	-.02101	-.00487	-.00034	-.00145	.10492
1200.800	100.840	-.115310	-.02810	-.00382	-.00033	-.00049	.10198
1200.900	199.100	-.20470	-.02909	-.00236	-.00015	-.00003	.09987
1200.900	300.170	-.23958	-.01914	-.00197	-.00022	-.00037	.10123
1201.000	400.380	-.23921	-.01927	-.00200	-.00021	-.00037	.10268
1200.900	500.930	-.23918	-.01929	-.00200	-.00022	-.00037	.10271
1201.000	600.010	-.23957	-.01930	-.00198	-.00022	-.00037	.10289
1201.000	1000.200	-.23908	-.01927	-.00199	-.00021	-.00037	.10267

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ037) (31 JUL 75)

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.8000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .300  
 DALPHA = -5.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 144/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.201	199.860	-.06784	-.01115	-.00389	-.00055	.00015	.11280
.264	300.070	-.12798	-.02466	-.00243	-.00015	.00015	.10310
.331	401.290	-.20206	-.02511	-.00209	-.00019	.00039	.10105
.381	600.190	-.23915	-.01920	-.00199	-.00020	.00037	.10177
.342	799.810	-.23942	-.01929	-.00204	-.00021	.00037	.10283
.376	999.470	-.23891	-.01925	-.00201	-.00020	.00037	.10263
1.613	1300.600	-.23921	-.01929	-.00199	-.00020	.00037	.10276

RUN NO. 145/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
400.450	196.750	-.08419	-.02085	-.00273	-.00010	.00014	.10660
400.540	300.220	-.17214	-.02762	-.00205	-.00020	.00039	.10150
400.550	397.530	-.22465	-.02311	-.00201	-.00019	.00037	.10087
400.560	599.800	-.23887	-.01927	-.00193	-.00020	.00037	.10272
400.430	799.840	-.23921	-.01928	-.00196	-.00020	.00037	.10279
400.710	1000.500	-.23946	-.01931	-.00197	-.00020	.00037	.10289
400.690	1300.500	-.23952	-.01930	-.00198	-.00020	.00037	.10291

RUN NO. 146/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
800.550	200.370	-.12933	-.02676	-.00227	-.00026	.00042	.10268
800.620	299.950	-.20499	-.02739	-.00203	-.00019	.00037	.10053
800.800	400.300	-.23953	-.01926	-.00199	-.00020	.00037	.10101
800.890	600.820	-.23893	-.01928	-.00198	-.00019	.00037	.10271
800.790	799.910	-.23970	-.01932	-.00199	-.00020	.00037	.10299
800.810	999.950	-.23913	-.01928	-.00195	-.00020	.00036	.10276
800.800	1300.000	-.23952	-.01932	-.00199	-.00019	.00037	.10295

RUN NO. 147/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
1201.000	200.400	-.17754	-.03172	-.00213	-.00017	.00032	.10006
1201.100	301.330	-.23001	-.02246	-.00198	-.00019	.00036	.10045
1200.800	401.150	-.23963	-.01901	-.00197	-.00020	.00037	.09917
1200.900	600.350	-.23894	-.01928	-.00196	-.00019	.00037	.10273
1200.900	799.660	-.23947	-.01930	-.00195	-.00019	.00037	.10290
1200.900	1000.10	-.23932	-.01928	-.00200	-.00019	.00037	.10284
1201.000	1300.300	-.23919	-.01929	-.00201	-.00020	.00037	.10277

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DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RT0018) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.500 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 CALPHA = -10.000 CETA = .000  
 ELEVIR = .000 AIRROM = .000  
 Y = .000

RUN NO. 148/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.123	300.630	.07611	-.02252	-.00353	-.00020	.00003	.11734
.115	400.080	-.07110	-.03669	-.00241	-.00017	.00021	.10242
.357	600.140	-.23680	-.02033	-.00199	-.00019	.00036	.10099
.330	799.910	-.23912	-.01927	-.00202	-.00019	.00037	.10275
.422	999.650	-.23953	-.01930	-.00201	-.00019	.00037	.10290
.212	1299.900	-.23954	-.01929	-.00201	-.00019	.00037	.10291

RUN NO. 149/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
400.560	299.800	-.04240	-.03864	-.00238	-.00017	.00003	.10105
400.600	400.020	-.16738	-.03450	-.00205	-.00017	.00024	.07725
400.370	598.650	-.24048	-.01893	-.00202	-.00018	.00037	.09763
400.540	799.540	-.23927	-.01929	-.00194	-.00019	.00037	.10293
400.690	1000.500	-.23934	-.01929	-.00197	-.00019	.00037	.10294
400.710	1300.600	-.23915	-.01928	-.00198	-.00019	.00037	.10298

RUN NO. 150/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
800.420	302.160	-.14958	-.03536	-.00217	-.00016	.00033	.09995
800.640	399.710	-.22312	-.02450	-.00201	-.00018	.00034	.09978
800.780	600.760	-.23895	-.01929	-.00199	-.00018	.00037	.10275
800.810	800.240	-.23933	-.01928	-.00202	-.00019	.00037	.10294
800.760	999.820	-.23911	-.01929	-.00202	-.00018	.00037	.10285
800.930	1299.800	-.23878	-.01925	-.00204	-.00018	.00037	.10272

RUN NO. 151/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	300.540	-.20896	-.02812	-.00209	-.00019	.00032	.09873
1200.800	400.270	-.23892	-.01907	-.00203	-.00018	.00036	.10014
1201.000	601.590	-.23840	-.01920	-.00204	-.00019	.00036	.10260
1200.800	800.060	-.23873	-.01922	-.00205	-.00019	.00037	.10269
1200.900	1000.300	-.23888	-.01924	-.00205	-.00019	.00037	.10276
1201.000	1300.100	-.23855	-.01921	-.00206	-.00019	.00037	.10264

DATE 02 AUG 75

IA13 SOURCE DATA

IA13, EXTERNAL TASK(T10)SEPARATING FROM ORB. 09

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(RTJ039) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XG  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -10.000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = .000 AIRLON = .000  
Y = 200.000

RUN NO. 155/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.215	300.350	.01256	-.03063	.03662	-.00478	.01677	.11737
.444	400.130	-.08985	-.03940	.00622	-.00135	.00987	.10218
.403	600.300	-.23870	-.01917	-.00202	-.00022	.00038	.10103
.338	799.970	-.23889	-.01925	-.00206	-.00019	.00037	.10279
.350	1000.200	-.23896	-.01926	-.00207	-.00019	.00036	.10280
.507	1300.500	-.23904	-.01928	-.00205	-.00019	.00037	.10284

RUN NO. 154/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
400.370	300.600	-.07929	-.03822	.00867	-.00190	.01084	.10381
400.590	400.890	-.19199	-.03047	-.00060	-.00042	.00211	.09883
400.650	600.820	-.23953	-.01898	-.00204	-.00020	.00036	.09934
400.630	799.900	-.23981	-.01903	-.00211	-.00018	.00037	.10276
400.550	999.800	-.23969	-.01923	-.00210	-.00018	.00037	.10271
400.580	1300.400	-.23976	-.01925	-.00210	-.00019	.00037	.10275

RUN NO. 153/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
800.850	303.240	-.17772	-.03266	.00022	-.00052	.00313	.09901
800.590	399.710	-.23368	-.02106	-.00192	-.00019	.00064	.10055
800.650	599.890	-.23063	-.01922	-.00202	-.00018	.00037	.10268
800.560	799.600	-.23877	-.01922	-.00207	-.00018	.00037	.10271
800.920	1000.200	-.23912	-.01925	-.00206	-.00019	.00037	.10286
800.850	1300.400	-.23990	-.01925	-.00209	-.00019	.00037	.10278

RUN NO. 152/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.600	248.810	-.22269	-.02421	-.00160	-.00025	.00109	.09924
1200.700	399.460	-.23949	-.01897	-.00207	-.00020	.00037	.09917
1201.000	600.810	-.23982	-.01923	-.00207	-.00019	.00037	.10275
1200.900	800.390	-.23906	-.01923	-.00209	-.00019	.00037	.10282
1200.900	1000.200	-.23990	-.01924	-.00205	-.00019	.00037	.10280
1201.200	1300.300	-.23993	-.01925	-.00205	-.00019	.00037	.10282

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IA13 SOURCE DATA

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IA13, EXTERNAL TANK (110) SEPARATING FROM ORB. 09

(TJUG:G) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.500 TOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DELTA = -10.000 DBETA = 5.000  
 ELEVTR = .000 ALT-PDN = .000  
 Y = 200.000

RUN NO. 156/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CB	CA
.034	300.480	.06923	-.02537	.02086	-.00179	.00507	.11614
.177	400.170	-.06152	-.03973	.00181	-.00049	.00470	.10229
.295	600.580	-.23615	-.02013	-.00204	-.00019	.00344	.10054
.303	800.030	-.23889	-.01926	-.00206	-.00019	.00037	.10279
.380	999.520	-.23855	-.01924	-.00206	-.00019	.00037	.10264
.297	1300.000	-.23829	-.01923	-.00210	-.00019	.00037	.10257

RUN NO. 157/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CB	CA
400.570	299.890	-.03979	-.04231	.00530	-.00103	.00030	.10195
400.650	400.060	-.17127	-.03441	-.00077	-.00038	.00103	.09843
400.480	599.110	-.23955	-.01885	-.00187	-.00023	.00036	.09700
400.480	739.550	-.23652	-.01925	-.00194	-.00020	.00036	.10265
400.650	1000.400	-.23882	-.01926	-.00194	-.00020	.00036	.10277
400.600	1300.630	-.23634	-.01924	-.00199	-.00019	.00036	.10258

RUN NO. 158/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CB	CA
800.420	301.390	-.16047	-.03517	-.00010	-.00047	.00262	.09906
800.450	399.800	-.22785	-.02298	-.00184	-.00021	.00072	.09987
800.840	600.570	-.23894	-.01924	-.00205	-.00019	.00036	.10277
800.820	800.280	-.23881	-.01924	-.00203	-.00019	.00036	.10273
800.760	999.990	-.23993	-.01924	-.00203	-.00019	.00036	.10275
800.810	1299.800	-.23894	-.01924	-.00199	-.00019	.00036	.10277

RUN NO. 159/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CB	CA
1201.000	300.450	-.21810	-.02570	-.00143	-.00026	.00115	.09888
1200.800	400.300	-.23964	-.01899	-.00198	-.00021	.00037	.09915
1201.200	501.310	-.23918	-.01926	-.00202	-.00019	.00036	.10288
1200.900	799.920	-.23858	-.01921	-.00202	-.00018	.00036	.10266
1201.000	1000.200	-.23948	-.01920	-.00204	-.00018	.00036	.10259
1201.000	1300.300	-.23869	-.01921	-.00204	-.00018	.00036	.10265

DATE 02 JUL 75

## IA13 SOURCE DATA

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IA13 EXTERNAL BANK (110) SEPARATING FROM ORB. 09

(RTJ041) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -10.000 BETA = .000  
DALPHA = -10.000 DBETA = 5.000  
ELEVTR = .000 AILRON = .000  
Y = .000

RUN NO. 163/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
129	300.360	.05996	-.02411	-.02500	.00179	-.01364	.11793
375	399.970	-.07205	-.03741	-.00745	.00040	-.00585	.10210
489	600.330	-.23619	-.02012	-.00210	-.00018	.00029	.10074
298	800.070	-.23869	-.01921	-.00207	-.00018	.00037	.10268
412	1000.390	-.23879	-.01921	-.00208	-.00018	.00036	.10272
500	1300.600	-.23859	-.01920	-.00208	-.00018	.00036	.10254

RUN NO. 162/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.290	300.680	-.05144	-.03613	-.00721	.00038	-.00525	.10147
400.640	401.640	-.16927	-.03379	-.00344	.00005	-.00082	.09662
400.640	600.910	-.23989	-.01888	-.00212	-.00018	.00037	.09808
400.430	799.900	-.23876	-.01920	-.00212	-.00018	.00037	.10269
400.540	999.740	-.23854	-.01921	-.00211	-.00018	.00036	.10265
400.790	1300.500	-.23856	-.01920	-.00209	-.00018	.00037	.10261

RUN NO. 161/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
800.420	300.340	-.14709	-.03510	-.00337	.00001	-.00087	.09957
800.380	398.420	-.22208	-.02460	-.00274	-.00016	.00013	.09951
800.790	600.680	-.23908	-.01923	-.00203	-.00018	.00036	.10283
800.600	799.700	-.23916	-.01921	-.00206	-.00018	.00036	.10272
800.870	1000.100	-.23857	-.01919	-.00203	-.00018	.00036	.10260
800.930	1300.500	-.23955	-.01920	-.00207	-.00018	.00036	.10265

RUN NO. 160/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	300.550	-.20919	-.03824	-.00238	-.00013	-.00005	.03860
1200.600	398.940	-.23916	-.01910	-.00208	-.00018	.00036	.10064
1200.900	600.550	-.23893	-.01922	-.00207	-.00019	.00036	.10277
1200.800	800.270	-.23834	-.01916	-.00207	-.00019	.00036	.10253
1200.500	1000.400	-.23833	-.01915	-.00207	-.00018	.00036	.10254
1200.000	1300.200	-.23850	-.01921	-.00207	-.00018	.00037	.10254

IA13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ01.2) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTR = .000 ATLON = .000  
 Y = .000

RUN NO. 184/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
.164	802.350	-1.10228	-.04847	-.00252	-.00015	.00003	.09594
.164	999.520	-.23923	-.01908	-.00214	-.00016	.00136	.10023
-.572	1299.000	-.23836	-.01921	-.00213	-.00017	.00035	.10262

RUN NO. 185/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.680	798.490	-.23661	-.02003	-.00212	-.00017	.00035	.09744
400.180	999.820	-.23944	-.01394	-.00204	-.00019	.00135	.09693
400.720	1300.800	-.23843	-.01921	-.00211	-.00018	.00036	.10263

RUN NO. 186/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
800.610	800.400	-.23916	-.01896	-.00210	-.00018	.00037	.09449
800.700	1000.700	-.23881	-.01925	-.00210	-.00018	.00036	.10280
800.540	1299.900	-.23808	-.01920	-.00210	-.00018	.00037	.10252

RUN NO. 187/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.500	800.070	-.23843	-.01923	-.00207	-.00018	.00036	.10267
1200.800	1000.600	-.23863	-.01923	-.00210	-.00018	.00036	.10274
1200.800	1299.500	-.23827	-.01921	-.00208	-.00018	.00036	.10257

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ043) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTX = .000 AIRON = .000  
 Y = 200.000

RUN NO. 171/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.054	801.570	-.13653	-.04087	.00298	-.00084	.00483	.09595
.314	998.590	-.23919	-.01903	-.00201	-.00021	.00036	.09953
.528	1300.600	-.23808	-.01918	-.00205	-.00018	.00036	.10252

RUN NO. 170/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
400.490	300.790	-.23885	-.01904	-.00199	-.00020	.00038	.09871
400.270	999.700	-.23877	-.01912	-.00208	-.00018	.00036	.10112
400.680	1300.400	-.23817	-.01930	-.00208	-.00018	.00036	.10253

RUN NO. 169/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
800.440	800.190	-.23907	-.01885	-.00199	-.00019	.00036	.09771
800.510	999.990	-.23868	-.01924	-.00209	-.00018	.00036	.10277
800.540	1300.100	-.23822	-.01921	-.00211	-.00018	.00036	.10257

RUN NO. 188/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	800.520	-.23849	-.01923	-.00208	-.00018	.00036	.10268
1201.000	1000.700	-.23826	-.01919	-.00209	-.00018	.00036	.10257
1201.000	1300.300	-.23852	-.01923	-.00211	-.00018	.00036	.10271

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13, EXTERNAL TANK (10) SEPARATING FROM ORB, 09

(RTJ044) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = -20.000 DBETA = 5.000  
 ELEVTR = .000 AIRON = .000  
 Y = 200.000

RUN NO. 172/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
.094	803.083	-.09948	-.04671	.00045	-.00021	.00207	.09593
-.024	999.380	-.23884	-.0 903	-.00211	-.00019	.00036	.10018
.256	1300.300	-.23841	-.0 321	-.00207	-.00017	.00036	.10264

RUN NO. 173/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.710	798.000	-.23590	-.02018	-.00195	-.00021	.00032	.09883
400.250	999.810	-.23896	-.01888	-.00206	-.00019	.00036	.09866
400.760	1300.800	-.23845	-.01921	-.00214	-.00018	.00035	.10267

RUN NO. 174/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
800.610	800.530	-.23913	-.01898	-.00213	-.00018	.00037	.09478
800.730	1000.500	-.23852	-.01920	-.00215	-.00017	.00036	.10268
800.420	1299.700	-.23810	-.01917	-.00210	-.00018	.00036	.10252

RUN NO. 175/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.400	800.060	-.23822	-.01918	-.00215	-.00018	.00036	.10260
1200.900	1000.700	-.23855	-.01920	-.00214	-.00017	.00036	.10269
1200.800	1300.000	-.23838	-.01919	-.00213	-.00018	.00036	.10263

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13,EXTERNAL TANK,101SEPARATING FROM ORB, 09

(RTJ045) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = -20.000 DBETA = 5.000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 179/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
.110	802.260	-.11470	-.04424	-.00719	.00026	-.00359	.09577
.356	997.890	-.23925	-.01904	-.00219	-.00015	.00036	.10028
.573	1300.800	-.23869	-.01919	.00216	-.00017	.00037	.10272

RUN NO. 178/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.660	800.750	-.23687	-.01982	-.00229	-.00015	.00017	.09791
400.160	999.610	-.23871	-.01899	-.00214	-.00018	.00036	.10023
400.610	1300.400	-.23887	-.01923	-.00216	-.00017	.00036	.10281

RUN NO. 177/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
800.230	800.260	-.23961	-.01883	-.00218	-.00018	.00036	.09611
800.620	1000.100	-.23820	-.01917	-.00214	-.00017	.00036	.10256
800.790	1200.300	-.23871	-.01919	-.00217	-.00017	.00036	.10272

RUN NO. 176/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.600	800.080	-.23820	-.01919	-.00213	-.00017	.00036	.10257
1200.900	1000.700	-.23838	-.01918	-.00213	-.00018	.00036	.10262
1200.900	1300.300	-.23866	-.01920	-.00211	-.00017	.00036	.10273

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ046) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = -30.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 180/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
07	1298.900	-23508	-02037	-00213	-00017	.00033	.09932

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ047) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -21.000 BETA = .000  
 DALPHA = 6.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 181/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.405	14.642	-41940	-00338	-00545	-00069	.00088	.13520
.376	102.670	-45151	-01150	-00212	-00012	.00058	.12436
.327	200.850	-47771	-01444	-00216	-00014	.00053	.12420
.410	300.630	-48950	-01328	-00218	-00013	.00047	.12482
.424	399.910	-49039	-01318	-00224	-00014	.00047	.12550
.597	599.640	-49040	-01321	-00226	-00014	.0047	.12553
.543	799.820	-49017	-01318	-00222	-00014	.00047	.12544
.383	999.290	-49004	-01320	-00220	-00014	.00047	.12544

RUN NO. 182/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
400.680	12.259	-39612	.00183	-00276	-00014	.00049	.12787
400.550	100.020	-43630	-01177	-00208	-00013	.00067	.12487
400.480	197.360	-47316	-01504	-00222	-00013	.00055	.12381
400.480	299.650	-48978	-01319	-00225	-00013	.00048	.12438
400.860	400.280	-48914	-01322	-00225	-00014	.00047	.12531
400.770	599.780	-49023	-01317	-00227	-00014	.00047	.12545
400.770	800.500	-48997	-01317	-00227	-00013	.00047	.12540
400.680	1000.400	-48980	-01321	-00228	-00014	.00047	.12541

DATE 02 AUG 75 1A13 SOURCE DATA

1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJCN7) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

RUN NO. 183/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
800.710	10.512	-39136	.00154	-.00133	-.00015	.00073	.12786
801.040	102.470	-41862	-.01126	-.00207	-.00014	.00072	.12562
800.840	200.420	-46156	-.01720	-.00228	-.00012	.00056	.12361
800.900	299.800	-49011	-.01323	-.00229	-.00012	.00048	.12421
800.760	400.470	-49050	-.01318	-.00230	-.00013	.00047	.12551
800.820	600.310	-49022	-.01322	-.00229	-.00013	.00047	.12550
900.800	800.430	-49036	-.01317	-.00228	-.00013	.00047	.12547
800.950	1000.000	-49020	-.01317	-.00228	-.00013	.00047	.12544

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -21.000 BETA = .000  
 DALPHA = 6.000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 184/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	11.411	-13927	-.01347	-.00216	-.00017	.00064	.12567
1200.900	100.140	-44315	-.01842	-.00224	-.00013	.00065	.12428
1200.900	200.070	-47215	-.01753	-.00232	-.00012	.00047	.12212
1201.000	299.910	-48922	-.01354	-.00229	-.00013	.00046	.12439
1200.600	403.240	-48968	-.01324	-.00230	-.00013	.00047	.12549
1201.000	601.110	-48961	-.01324	-.00230	-.00013	.00047	.12538
1201.100	800.500	-48975	-.01323	-.00228	-.00014	.00047	.12540
1201.100	1000.200	-49006	-.01325	-.00233	-.00013	.00047	.12549

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## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.8000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 90.000  
 ALPHA = -21.000 BETA = .000  
 DALPHA = 1.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 188/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CEL	CA
.278	7.750	-.34385	.00379	-.00854	-.00169	.00119	.15004
.343	95.454	-.37154	-.00407	-.00282	-.00011	.00050	.12676
.288	199.810	-.43795	-.01735	-.00243	-.00009	.00009	.12328
.737	297.590	-.47990	-.01532	-.00249	-.00010	.00051	.12305
.286	399.660	-.48888	-.01334	-.00246	-.00011	.00046	.12520
.448	599.880	-.49005	-.01321	-.00247	-.00011	.00046	.12549
.603	800.690	-.49021	-.01322	-.00246	-.00011	.00046	.12732
.565	1000.400	-.49103	-.01321	-.00245	-.00011	.00046	.12568

RUN NO. 187/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CEL	CA
400.440	11.158	-.33130	.01475	-.00772	-.00080	.00093	.13816
400.490	100.760	-.38565	-.00581	-.00199	-.00010	.00063	.12579
400.520	201.890	-.44028	-.01783	-.00236	-.00009	.00057	.12333
400.520	300.090	-.48143	-.01535	-.00239	-.00010	.00049	.12247
400.530	400.330	-.48946	-.01331	-.00245	-.00011	.00046	.12534
400.600	600.410	-.49051	-.01320	-.00242	-.00011	.00047	.12556
400.650	800.070	-.49029	-.01321	-.00238	-.00011	.00047	.12551
400.720	1000.400	-.49010	-.01324	-.00238	-.00012	.00047	.12552

RUN NO. 186/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CEL	CA
800.590	9.078	-.35625	.00558	-.00175	-.00019	.00051	.12819
800.590	100.200	-.38321	-.00481	-.00154	-.00007	.00073	.12644
800.630	196.370	-.43020	-.01754	-.00243	-.00009	.00059	.12365
800.690	299.250	-.47999	-.01571	-.00243	-.00011	.00049	.12212
800.730	401.280	-.48948	-.01328	-.00243	-.00012	.00047	.12539
800.730	600.780	-.48939	-.01321	-.00240	-.00012	.00047	.12536
800.730	800.370	-.48997	-.01323	-.00242	-.00011	.00047	.12542
801.020	1000.200	-.49042	-.01319	-.00242	-.00011	.00047	.12554

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ048) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = 3000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -21.000 BETA = .00  
 DALPHA = 1.000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 185/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	10.951	-43062	-0.1308	-0.0246	-0.0026	.00058	.12356
1200.700	100.280	-42581	-0.1818	-0.0183	-0.0002	.00085	.12497
1200.800	200.940	-45315	-0.2022	-0.0232	-0.0010	.00059	.12224
1200.900	300.480	-48569	-0.1462	-0.0233	-0.0011	.00048	.12149
1200.800	397.810	-48943	-0.1327	-0.0235	-0.0012	.00046	.12527
1201.000	599.600	-48991	-0.1321	-0.0235	-0.0012	.00047	.12541
1200.900	800.310	-49011	-0.1324	-0.0234	-0.0012	.00047	.12549
1200.900	1000.000	-49029	-0.1320	-0.0235	-0.0013	.00047	.12549

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = 3000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -21.000 BETA = .000  
 DALPHA = -4.000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

1A13 EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ049) (31 JUL 75)

RUN NO. 189/ 0 RN/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
.285	200.990	-43235	-0.1145	-0.0213	-0.0010	.00037	.12678
.414	303.540	-44091	-0.0285	-0.0249	-0.0009	.00058	.12229
.328	400.790	-46208	-0.1981	-0.0247	-0.0009	.00049	.12027
.442	599.690	-49062	-0.1324	-0.0249	-0.0010	.00046	.12561
.463	799.930	-49016	-0.1322	-0.0249	-0.0010	.00046	.12550
.217	958.410	-49033	-0.1321	-0.0251	-0.0010	.00046	.12551

RUN NO. 190/ 0 RN/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
400.570	199.920	-36475	-0.1539	-0.0231	-0.0010	.00066	.12387
400.600	295.440	-43147	-0.2178	-0.0250	-0.0009	.00054	.12159
400.770	39.300	-48034	-0.1608	-0.0247	-0.0010	.00045	.12054
400.590	800.650	-48963	-0.1328	-0.0248	-0.0011	.00046	.12549
400.610	800.210	-49013	-0.1327	-0.0248	-0.0010	.00046	.12557
400.680	1000.200	-49971	-0.1325	-0.0245	-0.0010	.00046	.12544

IA13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ049) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XREF = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YREF = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZREF = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -21.000 BETA = .000  
 DALPHA = -4.000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 191/ 0 RN/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
800.340	202.680	-39040	-0.01737	-0.00240	-0.00011	0.00072	0.12405
800.500	299.030	-45198	-0.02031	-0.00245	-0.00010	0.00054	0.12121
800.540	398.330	-48903	-0.01357	-0.00243	-0.00009	0.00046	0.12150
800.640	599.760	-49014	-0.01324	-0.00244	-0.00010	0.00046	0.12552
800.770	800.270	-49034	-0.01325	-0.00249	-0.00010	0.00046	0.12556
800.850	1000.500	-49062	-0.01322	-0.00245	-0.00011	0.00046	0.12559

RUN NO. 192/ 0 RN/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	400.840	-48810	-0.01360	-0.00242	-0.00009	0.00045	0.12432
1200.800	598.810	-48989	-0.01324	-0.00246	-0.00011	0.00046	0.12547
1201.000	799.880	-49076	-0.01324	-0.00242	-0.00010	0.00046	0.12568
1200.200	998.550	-48977	-0.01326	-0.00245	-0.00011	0.00046	0.12548

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XREF = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YREF = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZREF = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -21.000 BETA = .000  
 DALPHA = -9.000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

IA13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ050) ( 31 JUL 75 )

RUN NO. 193/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
174	400.610	-32542	-0.02723	-0.00252	-0.00010	0.00063	0.12386
299	600.210	-47015	-0.01869	-0.00235	-0.00010	0.00045	0.11810
300	799.790	-48985	-0.01324	-0.00234	-0.00011	0.00046	0.12548
774	997.910	-48978	-0.01327	-0.00236	-0.00011	0.00046	0.12547

RUN NO. 194/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.460	600.320	-48529	-0.01400	-0.00207	-0.00011	0.00093	0.11776
400.870	800.410	-49048	-0.01328	-0.00242	-0.00011	0.00046	0.12568
398.350	998.050	-49013	-0.01327	-0.00245	-0.00010	0.00047	0.12558

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ050) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

RUN NO. 195/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
800.230	599.280	-.48052	-.01467	-.00312	-.00006	-.00026	.12218
800.850	801.550	-.48944	-.01329	-.00244	-.00011	.00046	.12549
800.740	1000.500	-.48917	-.01331	-.00241	-.00010	.00046	.12544

RUN NO. 196/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.600	799.320	-.48968	-.01329	-.00244	-.00010	.00046	.12552
1199.600	998.360	-.48984	-.01329	-.00242	-.00010	.00046	.12553

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

RUN NO. 197/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
-2.812	997.730	-.48074	-.01512	-.00251	-.00009	.00043	.11824

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -21.000 BETA = .000  
 DALPHA = -9.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ051) ( 31 JUL 75 )

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -21.000 BETA = .000  
 DALPHA = -19.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

IA13, EXTERNAL TANK (T10) SEPARATING FROM ORB. 08 (RTJ032) (31 JUL 75)

## REFERENCE DATA

SREF = 2600.0000 SQ.FT. XPRP = 1089.6000 IN. XO  
 LREF = 1200.3000 INCHES YPRP = .0000 IN. YO  
 BREF = 1200.3000 INCHES ZPRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = -200.000

RUN NO. 198/ 0 RV/L = 6.58

X	Z	CM	CLM	CY	CYN	CBL	CA
.102	16.450	-.04607	-.01410	-.00370	-.00072	.00277	.08008
.032	98.844	-.03148	-.00779	-.00618	-.00510	.00317	.09260
.153	200.250	-.01538	-.00152	-.01320	-.00492	.00527	.08726
.083	303.040	.00837	-.00851	-.01112	-.00083	.00569	.08832
.243	404.360	.00907	-.01698	-.00926	-.00077	.00141	.08789
.132	600.140	-.05070	-.01311	-.00168	-.00027	.00284	.08049
.135	799.980	-.05333	-.01215	-.00180	-.00029	.00283	.08368
.225	1000.100	-.05333	-.01214	-.00159	-.00029	.00296	.08390

IA13, EXTERNAL TANK (T10) SEPARATING FROM ORB. 08 (RTJ033) (31 JUL 75)

## REFERENCE DATA

SREF = 2600.0000 SQ.FT. XPRP = 1089.6000 IN. XO  
 LREF = 1200.3000 INCHES YPRP = .0000 IN. YO  
 BREF = 1200.3000 INCHES ZPRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = .000

RUN NO. 199/ 0 RV/L = 6.57

X	Z	CM	CLM	CY	CYN	CBL	CA
.138	20.976	-.04954	-.01148	-.00088	-.00017	.00263	.07807
.182	99.172	-.05140	-.01286	-.00131	-.00045	.00274	.09059
.029	199.600	-.02772	.00108	-.00248	-.00092	.00281	.08956
.107	301.540	.01046	-.00384	-.00227	-.00054	.00333	.08850
.191	397.950	.03495	-.01598	-.00191	-.00059	.00382	.09086
.212	599.970	-.04708	-.01411	-.00163	-.00029	.00294	.08045
.225	799.730	-.05324	-.01213	-.00164	-.00029	.00295	.08389
.200	999.930	-.05324	-.01213	-.00166	-.00030	.00295	.08384

DATE 02 AUG 75

1A13 SOURCE DATA

1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ054) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = 200.000

RUN NO. 200/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.020	16.918	-.04970	-.01388	-.00720	-.00061	.00268	.08674
.091	95.313	-.03450	-.00924	.00065	.00291	.00238	.09266
.201	199.910	-.01807	-.00022	.00892	.00398	.00049	.08569
.127	303.120	.00727	-.00690	.00668	.00010	.00056	.08801
.227	404.730	.01178	-.01665	.00589	-.00165	.00547	.08787
.195	599.960	-.04841	-.01376	-.00141	-.00035	.00314	.08315
.257	799.890	-.05313	-.01215	-.00162	-.00029	.00295	.08381
.190	1000.000	-.05318	-.01215	-.00164	-.00029	.00295	.08381

1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ055) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = -5.000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

RUN NO. 201/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.051	18.651	-.03131	-.01118	.00957	-.00053	.00520	.08654
.106	98.255	-.02438	-.00912	.00034	-.00368	.00483	.09321
.128	200.170	-.01172	.00024	-.01109	-.00515	.00583	.08717
.086	303.040	.01531	-.00691	-.00827	-.00143	.00623	.08914
.014	400.160	.02123	-.01649	-.00885	.00053	.00278	.08830
.180	600.000	-.04826	-.01390	-.00177	-.00024	.00284	.08032
.197	799.920	-.05309	-.01217	-.00161	-.00029	.00295	.08381
-.019	1000.000	-.05306	-.01216	-.00163	-.00029	.00295	.08378

DATE 02 AUG 75

IA13 SOURCE DATA

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(RTJ056) ( 31 JUL 75 )

IA13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

RUN NO. 202/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.106	19.661	-.06222	-.01298	-.00588	-.00031	.00002	.07738
.042	100.330	-.05780	-.01300	-.00476	-.00074	.00170	.09062
.114	198.310	-.02860	.00098	-.00672	-.00224	.00244	.09050
.153	301.900	.00927	-.00378	-.00556	-.00063	.00370	.08830
.135	400.290	.03481	-.01570	-.00436	-.00007	.01738	.08972
.210	600.070	-.04643	-.01431	-.00170	-.00027	.00290	.08014
.115	799.890	-.05308	-.01277	-.00162	-.00029	.00295	.08390
.068	999.980	-.05310	-.0118	-.00164	-.00029	.00295	.08384

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 300 DBETA = 5.000  
ELEVTR = .000 AILRON = 10.000  
Y = .000

## PARAMETRIC DATA

IA13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ057) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

RUN NO. 203/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.268	23.474	-.03825	-.01037	-.01277	-.00068	.00008	.08406
-.004	101.120	-.03143	-.00888	-.00485	.00214	.00066	.09279
.044	204.550	-.01407	.00143	.00619	.01170	-.00045	.08648
.029	300.120	.01063	-.00454	.00382	.00060	.00048	.08829
.072	397.320	.02372	-.01541	.00532	-.00147	.00383	.08802
.234	600.000	-.04617	-.01432	-.00145	-.00035	.00318	.08137
.137	799.730	-.05289	-.01215	-.00165	-.00029	.00294	.08374
.253	1000.000	-.05285	-.01215	-.00165	-.00029	.00294	.08373

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
ELEVTR = .000 AILRON = 10.000  
Y = 200.000

## PARAMETRIC DATA

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ058) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2590.0000 50.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

RUN NO. 204/ 0 RN/L = 6.59

X	Z	CN	CLM	C	CYN	CA
.158	300.700	.10470	-.00939	-.02964	-.00354	-.00426
.202	400.410	.08806	-.01342	-.01745	-.00020	.00242
.205	602.300	.00353	-.02221	-.00515	.00037	-.02254
.255	800.330	-.05400	-.01176	-.00162	-.00028	.00294
.128	999.240	-.05281	-.01215	-.00164	-.00029	.00294
-.118	1298.600	-.05280	-.01214	-.00165	-.00029	.00294

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVTR = .000 ATLRON = 10.000  
 Y = -200.000

## PARAMETRIC DATA

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ059) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2590.0000 50.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

RUN NO. 205/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.151	301.070	.15388	-.00288	-.00334	-.00131	.00321	.09482
.022	399.180	.09595	-.01263	-.00255	-.00070	.00368	.08999
.145	599.280	.01040	-.02337	-.00171	-.00056	.00381	.08006
.093	797.490	-.05394	-.01170	-.00172	-.00028	.00294	.07913
.169	999.750	-.05273	-.01213	-.00169	-.00029	.00294	.08375
.400	1300.800	-.05263	-.01213	-.00169	-.00029	.00294	.08373

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVTR = .000 ATLRON = 10.000  
 Y = .000

## PARAMETRIC DATA



DATE 02 JUL 75

1A13 SOURCE DATA

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ061) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

RUN NO. 206/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.174	300.790	.11123	-.00807	.02489	.00211	.01076	.08221
.192	400.430	.07513	-.01379	.01294	-.00103	.00541	.09013
.249	602.160	.01005	-.02402	.00163	-.00137	.00959	.08295
.173	800.170	-.05261	-.01211	-.00167	-.00029	.00294	.08359
.036	999.320	-.05259	-.01212	-.00169	-.00029	.00294	.08371
.166	1299.800	-.05261	-.01213	-.00169	-.00030	.00294	.08373

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = 200.000

PARAMETRIC DATA

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ061) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

RUN NO. 207/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.246	301.710	.16373	-.00756	-.02072	-.00523	.00397	.09312
.165	408.570	.09613	-.01603	-.01277	-.00117	.00479	.08979
.202	602.480	.00981	-.02321	-.00458	.00018	-.00183	.07892
.232	800.230	-.05379	-.01171	-.00169	-.00028	.00293	.07927
.078	999.410	-.05264	-.01213	-.00167	-.00029	.00294	.08372
-.186	1298.700	-.05266	-.01213	-.00166	-.00029	.00294	.08373

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = -5.000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

PARAMETRIC DATA

DATE 02 AUG 75

IA13 SOURCE DATA

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ062) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = 5.000  
ELEVTR = .000 AILRON = 10.000  
Y = .000

RUN NO. 208/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.172	300.790	.12631	-.00267	-.01821	-.00096	-.00724	.09501
.128	400.570	.08381	-.00925	-.00888	-.00017	.00067	.08921
.076	602.650	.01219	-.02345	-.00249	-.00040	.00208	.08000
.142	800.360	-.05257	-.01212	-.00167	-.00029	.00294	.08353
-.031	999.230	-.05248	-.01214	-.00168	-.00029	.00293	.08368
-.264	1298.700	-.05256	-.01213	-.00167	-.00029	.00293	.08372

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IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ063) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = 5.000  
ELEVTR = .000 AILRON = 10.000  
Y = 200.000

RUN NO. 209/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.161	300.730	.16787	-.00511	.01421	.00336	.00204	.09213
.080	398.990	.09709	-.01499	.00777	-.00014	.00281	.08924
.182	599.310	.01606	-.02464	.00112	-.00126	.00940	.08163
.123	797.350	-.05403	-.01168	-.00167	-.00028	.00293	.07871
.236	999.810	-.05273	-.01215	-.00169	-.00029	.00294	.08385
.362	1300.700	-.05251	-.01215	-.00166	-.00029	.00293	.08376

IA13,EXTERNAL TANK(10)SEPARATING FROM ORB. 09

(RTJ054) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

RUN NO. 210/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.173	803.040	.27617	-.04061	-.03501	.00435	-.01058	.29009
.270	800.570	-.00181	-.02662	-.00482	.00013	-.00007	.07637
.039	999.640	-.05486	-.01148	-.00163	-.00029	.00293	.07488
-1.268	1298.000	-.05266	-.01218	-.00165	-.00029	.00294	.08396

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

IA13,EXTERNAL TANK(10)SEPARATING FROM ORB. 09

(RTJ065) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

RUN NO. 211/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.040	803.150	.40988	-.03987	-.00290	-.00143	.00465	.10220
-.037	798.170	.02638	-.03433	-.00214	-.00036	.00392	.07802
.070	999.880	-.05450	-.01153	-.00171	-.00027	.00293	.07578
.381	1300.500	-.05255	-.01215	-.00169	-.00039	.00294	.08391

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = .000

DATE 02 AUG 75

1A13 SOURCE DATA

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 08

(RTJ066) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

RUN NO. 212/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.167	603.240	.28927	-.04054	.03009	-.00591	.02541	.09873
.280	870.340	.02094	-.03229	.00150	-.00153	.00942	.08037
-.128	999.540	-.05459	-.01142	-.00160	-.00028	.00293	.07472
.131	1300.000	-.05243	-.01217	-.00168	-.00028	.00295	.08399

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = 200.000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

RUN NO. 213/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.142	602.020	.38440	-.04080	-.02228	.00111	-.00063	.10040
.194	800.630	.02565	-.03404	-.00405	.00005	.00156	.07707
-.057	999.700	-.05441	-.01154	-.00167	-.00027	.00294	.07580
-.1435	1297.900	-.05249	-.01217	-.00166	-.00028	.00295	.08395

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -5.000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ067) ( 31 JUL 75 )

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ068) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

RUN NO. 214/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.014	605.010	.36471	-.03981	-.02103	.00136	-.01302	.10363
.094	800.670	.01655	-.03105	-.00410	.00804	.00148	.07746
-.103	999.630	-.05443	-.01153	-.00165	-.00027	.00293	.07568
-1.468	1297.900	-.05241	-.01217	-.00167	-.00028	.00294	.08395

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = 5.000  
ELEVTR = .003 AILRON = 10.000  
Y = .000

## PARAMETRIC DATA

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ069) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

RUN NO. 215/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.050	502.350	.38693	-.03919	.01699	-.00362	.01019	.09892
-.006	798.100	.03818	-.03767	.00004	-.00102	.00685	.07801
.130	999.960	-.05451	-.01153	-.00167	-.00026	.00293	.07587
.344	1300.500	-.05254	-.01216	-.00169	-.00028	.00294	.08396

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = 5.000  
ELEVTR = .000 AILRON = 10.000  
Y = 200.000

## PARAMETRIC DATA

DATE 02 AUG 75

1A13 SOURCE DATA

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ070) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

RUN NO. 218/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.256	17.995	-.11536	-.01396	-.01800	-.00389	.00201	.10507
.282	100.260	-.10254	-.00846	-.02510	-.00808	.00235	.10448
.233	202.020	-.09378	-.00953	.01723	-.00182	.00454	.09911
.237	302.730	-.09440	-.01681	.01040	.00594	.00212	.09844
.210	400.800	-.11576	-.02101	.00339	.00017	.00051	.09420
.332	599.740	-.15024	-.01517	-.00166	-.00007	.00308	.09411
.335	799.800	-.15033	-.01520	-.00165	-.00007	.00308	.09442

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ071) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = .000

RUN NO. 217/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.191	20.766	-.11864	-.01095	-.00184	-.00036	.00302	.10135
.237	101.290	-.10156	-.01041	-.00217	-.00057	.00307	.10732
.193	201.890	-.08460	-.00496	-.00224	-.00049	.00314	.09904
.278	297.930	-.07282	-.01488	-.00181	-.00026	.00382	.10134
.229	395.660	-.10843	-.02070	-.00160	-.00019	.00345	.09473
.291	598.530	-.15071	-.01504	-.00159	-.00007	.00308	.09273
.277	800.180	-.15038	-.01521	-.00159	-.00007	.00308	.09444

DATE 02 AUG 75

IA13 SOURCE DATA

(RTJ072) ( 31 JUL 75 )

REFERENCE DATA

REF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

RUN NO. 218/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.171	17.524	-.11888	-.01433	.01212	.00251	.00397	.10604
.283	100.020	-.10136	-.00878	.01863	.00855	.00417	.10590
.258	202.190	-.09239	-.00866	.01328	.00134	.00227	.09934
.293	302.970	-.09144	-.01665	.00696	-.00123	.00486	.09867
.219	400.350	-.11140	-.02194	.00007	-.00057	.00658	.09510
.297	599.720	-.15050	-.0117	-.00181	-.00007	.00308	.09403
.379	799.970	-.15026	-.01521	-.00165	-.00007	.00329	.09439

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ073) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

RUN NO. 219/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.238	18.572	-.09748	-.01113	-.00764	-.00375	.00452	.10653
.305	100.800	-.08591	-.00794	-.01751	-.00703	.00398	.10628
.331	202.400	-.08525	-.00820	-.01427	-.00241	.00498	.10020
.365	303.300	-.08543	-.01636	-.00953	.00073	.00257	.09849
.220	401.120	-.11178	-.02125	-.00300	.00007	.00106	.09435
.409	599.670	-.15038	-.01518	-.00164	-.00007	.00308	.09412
.320	799.680	-.15037	-.01522	-.00165	-.00007	.00308	.09443

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.EXTERNAL TANK(T:01)SEPARATING FROM ORB. 09

(RTJ074) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

RUN NO. 220/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.252	18.148	-.13079	-.01298	-.01218	-.00123	.00047	.10049
.220	97.593	-.11808	-.01158	-.00897	-.00137	.00132	.10764
.263	202.100	-.08682	-.00482	-.00758	-.00098	.00276	.10222
.312	304.120	-.07352	-.01536	-.00527	.00035	.00384	.10011
.360	401.370	-.11039	-.02073	-.00197	-.00012	.00275	.09457
.253	599.780	-.15098	-.01507	-.00159	-.00007	.00308	.09326
.236	799.740	-.15028	-.01521	-.00163	-.00006	.00307	.09434

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
ELEVTR = .000 AILRON = 10.000  
Y = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

RUN NO. 221/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.254	22.712	-.10290	-.01051	.00269	.00260	.00128	.10555
.192	101.690	-.08847	-.00704	.01149	.00551	.00213	.10549
.206	199.490	-.08715	-.00646	.00996	.00200	.00216	.09499
.215	297.780	-.08142	-.01533	.00613	-.00102	.00414	.09858
.184	396.360	-.10534	-.02192	-.00012	-.00050	.00626	.09517
.301	598.670	-.15060	-.01519	-.00163	-.00006	.00308	.09407
.298	800.130	-.15033	-.01521	-.00164	-.00006	.00308	.09439

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
ELEVTR = .000 AILRON = 10.000  
Y = 200.000

1A13.EXTERNAL TANK(T:01)SEPARATING FROM ORB. 09

(RTJ075) ( 31 JUL 75 )



IA13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ075) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

RUN NO. 222/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.273	300.760	.05211	-.02213	-.03688	.00072	-.00723	10523
.357	400.420	-.02868	-.02604	-.01658	.00200	-.00202	.09758
.181	599.650	-.14543	-.01685	-.00188	.00000	.00291	.08961
.327	800.110	-.15044	-.01523	-.00163	-.00006	.00307	.09445
.422	999.870	-.15036	-.01522	-.00163	-.00006	.00308	.09443
.069	1299.000	-.15038	-.01521	-.00163	-.00006	.00308	.09441

IA13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ077) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

RUN NO. 223/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.253	301.180	.12403	-.01471	-.00352	-.00072	.00402	.10651
.25	399.210	.02234	-.02830	-.00204	-.00043	.00462	.10111
.157	800.030	-.14098	-.01807	-.00180	-.00007	.00305	.08728
.291	800.310	-.15038	-.01520	-.00158	-.00006	.00307	.09448
.261	999.870	-.15020	-.01518	-.00160	-.00006	.00307	.09439
.433	1300.400	-.15029	-.01520	-.00159	-.00006	.00307	.09444

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = .000.000

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = .000

DATE 02 JUL 75

1A13 SOURCE DATA

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1A13.EXTERNAL TANK(T10)SEPARATING FROM DRB. 09

(RTJ078) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

RUN NO. 224/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.218	300.810	.08285	-.02203	.03240	-.00180	.01572	.10710
.255	400.400	-.01348	-.02914	.01330	-.00283	.01132	.10012
.179	599.670	-.14468	-.01763	-.00136	-.00011	.00329	.08827
.328	800.090	-.15020	-.01519	-.00159	-.00006	.00307	.09438
.293	999.810	-.15029	-.01518	-.00160	-.00006	.00307	.09440
.390	1299.900	-.15017	-.01518	-.00161	-.00006	.00307	.09434

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = 200.000

1A13.EXTERNAL TANK(T10)SEPARATING FROM DRB. 09

(RTJ079) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

RUN NO. 225/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.255	301.600	.11181	-.02011	-.02619	-.00180	.00207	.10629
.348	400.610	.00649	-.02981	-.01360	.00128	.00080	.09914
.197	599.810	-.14313	-.01747	-.00180	-.00001	.00290	.08731
.337	800.150	-.15012	-.01520	-.00158	-.00007	.00307	.09437
.200	999.630	-.15022	-.01519	-.00163	-.00007	.00307	.09440
-.062	1299.200	-.15017	-.01518	-.00157	-.00007	.00307	.09439

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -10.000 DBETA = -5.000  
 ELEVTR = .000 AILRON = 10.000  
 Y = -200.000

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REFERENCE DATA

1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

SREF = 2690.0000 SQ.FT.

LREF = 1290.3000 INCHES

BREF = 1290.3000 INCHES

SCALE = .0100

XMRP = 1089.6000 IN. XO

YMRP = .0000 IN. YO

ZMRP = 400.0000 IN. ZO

MACH = 4.520

ALPHA = -5.000

DALPHA = -10.000

ELEVTR = .000

Y = .000

PTOTAL = 80.000

BETA = .000

DBETA = 5.000

AILRON = 10.000

RUN NO. 226/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.300	301.420	.10063	-.01484	-.02157	.00076	-.00902	.10689
.139	407.660	.01305	-.02622	-.00845	.00067	.00090	.09937
.230	599.700	-.14029	-.01822	-.00181	-.00001	.00298	.08857
.308	800.170	-.15033	-.01520	-.00167	-.00004	.00307	.09444
.209	999.550	-.15024	-.01519	-.00165	-.00005	.00307	.09441
.078	1299.300	-.15040	-.01521	-.00163	-.00005	.00307	.09448

REFERENCE DATA

1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

SREF = 2690.0000 SQ.FT.

LREF = 1290.3000 INCHES

BREF = 1290.3000 INCHES

SCALE = .0100

XMRP = 1089.6000 IN. XO

YMRP = .0000 IN. YO

ZMRP = 400.0000 IN. ZO

MACH = 4.520

ALPHA = -5.000

DALPHA = -10.000

ELEVTR = .000

Y = 200.000

PTOTAL = 80.000

BETA = .000

DBETA = 5.000

AILRON = 10.000

RUN NO. 227/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.140	300.300	.111579	-.01775	.02044	.00066	.00635	.10664
.085	398.910	.01335	-.03013	.00952	-.00198	.00764	.09906
.241	599.970	-.14245	-.01771	-.00143	-.00009	.00328	.08681
.231	800.450	-.15034	-.01519	-.00163	-.00004	.00306	.09445
.325	999.990	-.15022	-.01518	-.00165	-.00005	.00306	.09437
.388	1300.300	-.15030	-.01519	-.00165	-.00004	.00306	.09441

DATE 02 AUG 75

1A13 SOURCE DATA  
1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ082) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1099.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 90.000  
ALPHA = -5.000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

RUN NO. 228/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.178	601.980	.20840	-.04894	-.03348	.00478	-.02408	.10959
.187	799.720	-.11045	-.02765	-.00419	.00040	.00139	.08657
.247	999.990	-.15157	-.01477	-.00169	-.00003	.00304	.08714
-1.010	1298.500	-.15029	-.01519	-.00168	-.00004	.00307	.09440

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ083) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1099.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = .000

RUN NO. 229/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CB	CA
.165	602.090	.31823	-.04729	-.00248	-.00111	.00467	.10645
.116	799.430	-.07352	-.03780	.00223	.00005	.00348	.08571
.277	1000.300	-.15158	-.01473	-.00158	-.00005	.00304	.08624
.258	1300.200	-.15009	-.01517	-.00158	-.00007	.00305	.09434

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DATE 02 AUG 75

IA13 SOURCE DATA

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IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ084) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

RUN NO. 230/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.218	602.130	.21749	-.04873	.02941	-.00591	.03348	.10918
.124	800.130	-.09497	-.03062	.00083	-.00056	.00616	.08796
.110	949.820	-.15148	-.01473	-.00158	-.00004	.00304	.08711
.136	1300.000	-.15017	-.01517	-.00160	-.00005	.00306	.09439

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = 200.000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

RUN NO. 231/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
-.007	603.330	.28728	-.04640	-.01905	.00165	-.00879	.0870
.253	799.870	-.07432	-.03719	-.00355	.00031	.00237	.08552
.164	999.940	-.15151	-.01472	-.00162	-.00005	.00304	.08604
-.1054	1298.300	-.14997	-.01517	-.00161	-.00006	.00308	.09430

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = -20.000 DBETA = -5.000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ085) ( 31 JUL 75 )

DATE 02 AUG 75

IA13 SOURCE DATA

IA13,EXTERNAL TANK(10)SEPARATING FROM ORB. 09

(RTJ086) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

PARAMETRIC DATA

MACH = .520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = -20.000 DBETA = 5.000  
ELEVTR = .000 ATLON = 10.000  
Y = .000

RUN NO. 232/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.205	603.540	.39424	-.04752	-.02477	.00255	-.01953	.10816
.146	799.900	-.05936	-.03347	-.00439	.00042	.00133	.08581
.078	999.800	-.15147	-.01471	-.00184	-.00004	.00304	.08599
-.943	1298.400	-.15017	-.01518	-.00162	-.00005	.00306	.09438

IA13,EXTERNAL TANK(10)SEPARATING FROM ORB. 09

(RTJ087) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

PARAMETRIC DATA

MACH = .520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = -20.000 DBETA = 5.000  
ELEVTR = .000 ATLON = 10.000  
Y = 200.000

RUN NO. 233/ 0 RN/L = 4.83

X	Z	CN	CLM	Y	CYN	CBL	CA
.227	602.080	.30335	-.04577	.01517	-.00366	.01902	.11000
.060	799.350	-.06568	-.03953	-.00115	-.00030	.00488	.08624
.243	1000.300	-.15167	-.01473	-.00158	-.00005	.00304	.08603
.189	1300.100	-.15010	-.01517	-.00162	-.00005	.00306	.09437

DATE 02 AUG 75

1A13 SOURCE DATA

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ000) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. YO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = 10.000 ALLRON = .000  
 Y

RUN NO. 234/ 0 RN/L = 9.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.123	2.613	-.03852	-.01074	-.00130	-.00020	.00021	.07598
.175	100.730	-.04135	-.01621	-.00176	-.00037	.00024	.09151
.038	198.070	-.01930	-.00201	-.00298	-.00079	.00036	.09132
.167	301.760	.02091	-.00718	-.00256	-.00038	.00050	.09014
.199	399.900	.04890	-.02021	-.00231	-.00031	.00037	.09284
.211	592.960	-.03416	-.01831	-.00199	-.00028	.00025	.08736
.153	799.850	-.04238	-.01568	-.00197	-.00028	.00026	.08489
.203	1000.300	-.04230	-.01563	-.00198	-.00027	.00026	.08476

RUN NO. 235/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.390	-1.458	-.01798	.00283	.00274	-.00103	.00034	.09411
400.380	100.110	.01773	-.00166	-.00294	-.00064	.00043	.08711
400.410	200.180	.03912	-.00788	-.00250	-.00040	.00026	.09028
400.330	300.090	.06767	-.02378	-.00272	-.00023	.00008	.09000
400.330	399.990	.00665	-.02584	-.00221	-.00024	.00008	.08582
400.430	598.890	-.04199	-.01560	-.00203	-.00029	.00026	.08469
400.460	799.830	-.04201	-.01563	-.00201	-.00029	.00026	.08482
400.540	1000.100	-.04199	-.01564	-.00204	-.00028	.00028	.08454

RUN NO. 236/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.600	1.472	.08118	.01544	-.00241	-.00078	.00019	.08636
800.570	100.030	.09012	-.01528	-.00335	-.00016	.00026	.09236
800.570	200.130	.05609	-.02749	-.00244	-.00022	.00025	.08798
800.570	300.740	-.00468	-.02493	-.00216	-.00024	.00014	.08346
800.490	400.030	-.03995	-.01644	-.00204	-.00029	.00027	.08393
800.630	599.940	-.04199	-.01564	-.00204	-.00028	.00026	.08482
800.540	799.600	-.04198	-.01562	-.00205	-.00029	.00026	.08473
800.680	999.960	-.04199	-.01562	-.00204	-.00028	.00026	.08473

(RTJ088) ( 31 JUL 75 )

DATE 02 AUG 75  
1A13 SOURCE DATA  
1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1069.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

RUN NO. 237/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	-.178	.15526	-.02273	-.00275	-.00025	-.00068	.08974
1200.800	59.679	.06810	-.03283	-.00239	-.00018	-.00014	.08754
1200.800	206.110	-.0.973	-.02260	-.00203	-.00027	.00022	.08136
1200.700	259.400	-.04228	-.01530	-.00201	-.00028	.00025	.08444
1200.700	399.520	-.04286	-.01536	-.00201	-.00027	.00026	.08221
1200.700	599.260	-.04207	-.01565	-.00199	-.00028	.00026	.08481
1200.800	800.260	-.04201	-.01565	-.00202	-.00027	.00025	.08479
1200.800	1000.100	-.04198	-.01563	-.00203	-.00027	.00026	.08471

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = 10.000 AILRON = .000  
Y = .000

(RTJ089) ( 31 JUL 75 )

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1069.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

RUN NO. 238/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.185	299.870	.14679	-.00658	-.00402	-.00079	-.00013	.09703
-.105	399.580	.10639	-.01628	-.00301	-.00031	.00019	.09112
.190	602.310	.02908	-.02914	-.00225	-.00022	.00000	.08494
.274	800.130	-.04181	-.01559	-.00199	-.00027	.00026	.08441
.097	999.330	-.04172	-.01561	-.00200	-.00027	.00026	.08458
.041	1299.400	-.04173	-.01561	-.00201	-.00027	.00026	.08459

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.030 DBETA = .000  
ELEVTR = 10.000 AILRON = .000  
Y = .000

RUN NO. 239/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
400.440	300.050	.14505	-.02444	-.00278	-.00031	-.00010	.09040
400.390	399.430	.10730	-.03118	-.00277	-.00018	-.00032	.08824
400.410	600.360	-.03591	-.01771	-.00208	-.00025	.00025	.08261
400.340	800.050	-.04183	-.01562	-.00204	-.00027	.00026	.08457
400.390	1000.100	-.04178	-.01562	-.00208	-.00027	.00026	.08457
400.430	1300.300	-.04175	-.01563	-.00205	-.00027	.00026	.08461

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DATE 02 AUG 75

IA13 SOURCE DATA

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IA13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ093) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.5000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVTR = 10.000 AILRON = .000  
 Y = .000

RUN NO. 240/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.750	330.300	.08205	-.03582	-.00244	-.00018	-.00019	.08543
800.840	400.960	-.00360	-.02594	-.00215	-.00022	.00016	.08084
800.660	600.240	-.04169	-.01562	-.00199	-.00027	.00026	.08456
800.680	799.790	-.04167	-.01561	-.00202	-.00027	.00026	.08451
800.790	1000.000	-.04166	-.01562	-.00201	-.00027	.00026	.08452
800.630	1299.600	-.04176	-.01563	-.00202	-.00027	.00026	.08461

RUN NO. 241/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	300.060	-.02570	-.02122	-.00212	-.00025	.00025	.08056
1200.700	399.970	-.04260	-.01538	-.00206	-.00026	.00025	.08235
1200.600	598.840	-.04180	-.01564	-.00203	-.00026	.00025	.08461
1200.800	799.770	-.04179	-.01563	-.00206	-.00025	.00025	.08456
1200.900	1000.300	-.04170	-.01562	-.00205	-.00026	.00025	.08453
1200.800	1299.600	-.04178	-.01564	-.00200	-.00025	.00026	.08459

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

IA13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ090) ( 31 JUL 75 )

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTR = 10.000 AILRON = .000  
 Y = .000

RUN NO. 242/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
-.643	800.830	.39889	-.04666	-.00401	-.00012	-.00095	.10600
.237	800.550	.06138	-.04381	-.00235	-.00016	.00000	.08018
-.043	999.640	-.04288	-.01520	-.00202	-.00024	.00025	.07988
-.877	1298.300	-.04173	-.01556	-.00202	-.00025	.00025	.08468

DATE 02 AUG 75 1A13 SOURCE DATA

1A13, EXTERNAL TANK (10) SEPARATING FROM ORB. 09

(RTJ090) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = 10.000 AILRON = .000  
Y .000

RUN NO. 243/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
401.500	600.700	.15761	-.06472	-.00277	-.00008	-.00028	.08002
400.160	799.920	-.04264	-.01534	-.00213	-.00022	.00025	.08152
400.430	1000.200	-.04159	-.01564	-.00209	-.0002	.00025	.08455
400.470	1300.300	-.04158	-.01565	-.00211	-.00022	.00025	.08456

RUN NO. 244/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.970	601.210	-.03914	-.01662	-.00210	-.00021	.00025	.08041
800.470	800.220	-.04146	-.01557	-.00211	-.00021	.00025	.08467
800.570	1000.000	-.04150	-.01567	-.00213	-.00021	.00025	.08463
800.490	1299.800	-.04151	-.01567	-.00213	-.00021	.00025	.08467

RUN NO. 245/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	600.720	-.04338	-.01502	-.00204	-.00021	.00025	.07736
1200.300	799.130	-.04155	-.01566	-.00208	-.00021	.00025	.08460
1200.700	999.560	-.04153	-.01567	-.00209	-.00020	.00025	.08461
1200.700	1299.800	-.04155	-.01567	-.00214	-.00021	.00025	.08464

(RTJ091) ( 31 JUL 75 )

IA13, EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

## REFERENCE DATA

SREF = 2650.0000 SO. FT. XPRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = 10.000 AIRLON = .000  
 Y = 200.000

RUN NO. 246/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.097	7.032	-.03776	-.01685	-.00882	-.00075	.00020	.00564
.075	100.250	-.02288	-.01216	.00028	.00335	-.00018	.09351
.116	199.590	-.00653	-.00369	.00817	.00429	-.00242	.08813
.115	302.730	-.02114	-.01077	.00596	.00051	-.00202	.08940
.168	399.870	.02812	-.02052	.00558	-.00135	.00173	.08952
.194	599.030	-.03552	-.01772	-.00196	-.00029	.00055	.08376
.260	799.710	-.04166	-.01566	-.00219	-.00021	.00025	.08456
.205	1000.300	-.04163	-.01565	-.00222	-.00021	.00024	.08451

RUN NO. 247/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.350	9.167	.00297	-.00339	.01187	.00892	-.00121	.08909
400.350	100.090	.01452	-.00656	.00822	.00366	-.00237	.08593
400.390	198.330	.02661	-.01175	.00815	-.00012	-.00187	.08870
400.330	296.670	.03426	-.02270	.00578	.00162	.00390	.08998
400.270	396.280	.00753	-.02621	.00024	-.00108	.00570	.08569
400.410	599.090	-.04219	-.01578	-.00224	-.00019	.00024	.08226
400.420	799.800	-.04144	-.01563	-.00223	-.00020	.00024	.08445
400.490	1000.100	-.04152	-.01566	-.00224	-.00019	.00024	.08461

RUN NO. 248/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.660	9.791	.04277	-.00838	.01211	.00177	.00015	.08582
800.660	99.816	.03673	-.01671	.01012	-.00128	.00122	.08906
800.520	204.660	.04681	-.02771	.00411	-.00178	.00907	.08901
800.490	300.330	-.00572	-.02484	.00052	-.00087	.00378	.08420
800.590	400.030	-.04160	-.01558	-.00220	-.00020	.00025	.08381
800.630	600.030	-.04144	-.01565	-.00221	-.00019	.00024	.08460
800.600	799.590	-.04139	-.01565	-.00224	-.00020	.00024	.08456
800.610	1000.000	-.04134	-.01564	-.00222	-.00019	.00024	.08451

DATE 02 AUG 75

IA13 SOURCE DATA

IA13, EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ091) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

RUN NO. 249/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	10.095	.10672	-.02881	.01249	-.00288	.01119	.09282
1200.800	99.775	.05722	-.03465	.00336	-.00179	.01103	.08659
1200.800	200.120	-.02725	-.02030	-.00145	-.00043	.00129	.08420
1200.800	299.590	-.04223	-.01541	-.00213	-.00020	.00025	.08243
1200.900	399.530	-.04201	-.01543	-.00212	-.00020	.00025	.08279
1200.800	599.530	-.04141	-.01564	-.00215	-.00020	.00025	.08450
1200.900	800.300	-.04144	-.01564	-.00220	-.00020	.00025	.08454
1200.800	1000.000	-.04138	-.01563	-.00222	-.00019	.00025	.08449

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = 10.000 AILRON = .000  
Y = 200.000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

RUN NO. 250/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
115	300.020	.11769	-.01195	.02346	.00259	.00722	.09383
-.075	399.610	.08975	-.01819	.01204	-.00057	.00173	.09235
.274	602.040	.02446	-.02858	.00113	-.00122	.00706	.08546
.234	800.040	-.04140	-.01566	-.00218	-.00019	.00024	.08456
.096	999.300	-.04132	-.01564	-.00221	-.00019	.00024	.08449
.084	1299.400	-.04131	-.01564	-.00224	-.00019	.00024	.08445

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = 10.000 AILRON = .000  
Y = 200.000

IA13, EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ092) ( 31 JUL 75 )

ORIGINAL PAGE IS  
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DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ092) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVR = 10.000 AILRON = .000  
 Y = 200.000

RUN NO. 253/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.800	300.230	.07120	-.03438	.00450	-.00189	.01243	.08688
800.770	400.590	-.00826	-.02529	-.00069	-.00080	.00333	.08281
800.810	800.090	-.04170	-.01567	-.00223	-.00018	.00024	.08466
800.610	799.730	-.04175	-.01568	-.00223	-.00018	.00024	.08471
800.740	1000.100	-.04176	-.01568	-.00226	-.00018	.00024	.08475
800.680	1299.600	-.04171	-.01566	-.00224	-.00018	.00024	.08462

RUN NO. 253/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	299.970	-.03586	-.01803	-.00191	-.00023	.00048	.08154
1200.700	399.840	-.04281	-.01534	-.00222	-.00017	.00024	.08154
1200.600	598.800	-.04187	-.01567	-.00224	-.00018	.00024	.08466
1200.800	799.990	-.04179	-.01566	-.00226	-.00018	.00024	.08462
1200.800	1000.200	-.04175	-.01568	-.00231	-.00018	.00024	.08462
1200.800	1299.600	-.04176	-.01567	-.00227	-.00018	.00024	.08466

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ093) ( 31 JUL 75 )

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVR = 10.000 AILRON = .000  
 Y = 200.000

RUN NO. 254/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
-395	800.180	.30576	-.04638	.02855	-.00501	.02018	.10156
.227	800.190	.04571	-.04024	.00175	-.00172	.00830	.08109
-.021	939.800	-.04308	-.01518	-.00219	-.00018	.00024	.07936
-.858	1298.330	-.04169	-.01565	-.00229	-.00018	.00024	.08460

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 EXTERNAL TANK(T10)SEPARATING) FROM ORB. 09 (RTJ093) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVIR = 10.000 AILRON = .000  
 Y = 200.000

RUN NO. 255/ 0 RN/L = 8.57

X	Z	CN	CLM	CY	CYN	CBL	CA
401.110	600.640	.12635	-.05692	.00644	-.00321	.01763	.08258
400.180	799.940	-.04291	-.01528	-.00222	-.00018	.00025	.08078
400.390	999.910	-.04183	-.01568	-.00227	-.00018	.00025	.08476
400.520	1300.400	-.04175	-.01566	-.00227	-.00018	.00025	.08462

RUN NO. 256/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.890	601.300	-.04222	-.01547	-.00220	-.00018	.00025	.08321
800.410	800.070	-.04161	-.01566	-.00223	-.00018	.00025	.08459
800.520	999.990	-.04172	-.01568	-.00226	-.00018	.00025	.08478
800.430	1299.800	-.04173	-.01567	-.00228	-.00019	.00025	.08463

RUN NO. 257/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	600.790	-.04307	-.01520	-.00227	-.00016	.00024	.07986
1200.300	798.800	-.04178	-.01568	-.00230	-.00017	.00024	.08468
1200.700	999.710	-.04179	-.01565	-.00233	-.00017	.00024	.08468
1200.700	1299.800	-.04178	-.01566	-.00235	-.00017	.00025	.08472

DATE 02 AUG 75

IA13 SOURCE DATA

PAGE R2

(RTJ094) ( 31 JUL 75 )

IA13.EXTERNAL TANK(10)SEPARATING FROM 088. 09

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = -40.000 AILRON = .000  
Y = 200.000

RUN NO. 258/ 0 RN/L = 8.60

X	Z	CN	CLM	CY	CYN	CBL	CA
.309	7.208	-.09870	-.00335	-.00889	-.00009	.00180	.10360
.032	100.340	-.08699	.00177	.00068	.00373	.00074	.11314
.083	199.710	-.07529	.01155	.00820	.00460	-.00128	.11099
.124	302.780	-.06266	.00567	.00620	.00092	-.00124	.11293
-.016	399.780	-.05122	-.00253	.00563	-.00094	.00243	.11212
.118	599.980	-.10912	-.00124	-.00198	.00009	.00085	.10902
.297	799.720	-.11378	.00037	-.00214	.00010	.00070	.10889
.149	1000.400	-.11394	.00038	-.00217	.00011	.00071	.10902

RUN NO. 259/ 0 RN/L = 8.60

X	Z	CN	CLM	CY	CYN	CBL	CA
400.360	9.069	-.06236	.01115	.01083	.01026	.00108	.11034
400.340	100.090	-.05720	.00960	.00788	.00483	-.00070	.10911
400.370	193.260	-.04714	.00487	.00864	.00046	-.00003	.11187
400.380	296.720	-.04492	-.00462	.00566	-.00104	.00427	.11191
400.340	396.220	-.07537	-.00709	-.00032	-.00024	.00422	.10795
400.460	598.990	-.11377	.00038	-.00222	.00010	.00069	.10839
400.360	799.730	-.11372	.00033	-.00221	.00010	.00059	.10874
400.410	1000.000	-.11361	.00032	-.00221	.00009	.00069	.10864

RUN NO. 260/ 0 RN/L = 8.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.580	9.890	-.02759	.00770	.01341	.00250	.00272	.10686
800.490	99.784	-.03831	.00024	.01032	-.00056	.00263	.11082
800.600	204.740	-.03480	-.00894	.00405	-.00110	.00846	.11091
800.650	300.440	-.09030	-.00558	-.00091	-.00012	.00201	.10707
800.460	400.030	-.11367	.00033	-.00215	.00011	.00070	.10913
800.560	599.990	-.11370	.00032	-.00217	.00011	.00049	.10869
800.560	799.550	-.11364	.00032	-.00219	.00010	.00069	.10869
800.500	1000.000	-.11362	.00032	-.00218	.00010	.00069	.10866

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13, EXTERNAL TANK (110) SEPARATING FROM ORB. 09

(RTJ094) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

RUN NO. 261/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	12.529	.02802	-.01078	.01139	-.00135	.01193	.11170
1200.900	99.732	-.02992	-.01404	.00269	-.00070	.00867	.10771
1200.700	200.230	-.10425	.00284	-.00162	.00007	.00110	.10675
1200.600	299.550	-.11432	.00055	-.00226	.00015	.00072	.10616
1200.800	399.470	-.11376	.00033	-.00219	.00014	.00072	.10851
1200.700	599.370	-.11371	.00032	-.00217	.00015	.00073	.10867
1200.900	800.120	-.11368	.00032	-.00215	.00014	.00073	.10867
1200.800	1000.000	-.11367	.00031	-.00216	.00015	.00073	.10866

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVR = -40.000 AILRON = .000  
 Y = 200.000

IA13, EXTERNAL TANK (110) SEPARATING FROM ORB. 09

(RTJ095) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

RUN NO. 262/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
.214	300.060	.04474	.00488	.02335	.00343	.00787	.11348
.023	399.550	.00523	.00114	.01178	.00034	.00213	.11359
.223	602.110	-.06028	-.00887	.00087	-.00037	.00590	.10822
.191	799.960	-.11425	.00054	-.00210	.00015	.00073	.10696
.029	999.320	-.11385	.00034	-.00208	.00014	.00073	.10897
.193	1259.500	-.11376	.00033	-.00218	.00010	.00069	.10881

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVR = -40.000 AILRON = .000  
 Y = 200.000

RUN NO. 263/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
400.370	299.980	.01580	-.00316	.01488	-.00078	.00446	.11105
400.380	399.970	-.01781	-.00932	.00679	-.00133	.00687	.11161
400.550	600.200	-.11136	-.00055	-.00211	.00011	.00080	.10824
400.400	799.900	-.11390	.00039	-.00208	.00014	.00073	.10915
400.490	1000.200	-.11380	.00038	-.00220	.00012	.00071	.10904
400.540	1300.300	-.11367	.00038	-.00217	.00013	.00071	.10895

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REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = -40.000 AILRON = .000  
Y = 200.000

RUN NO. 264/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.880	300.250	-.01599	-.01368	.00408	-.00105	.01087	.10847
800.730	400.750	-.09359	-.00537	-.00089	.00000	.00148	.10559
800.740	600.210	-.11380	.00041	-.00202	.00018	.00076	.10857
800.590	799.750	-.11355	.00036	-.00206	.00017	.00075	.10896
800.670	1000.000	-.11365	.00036	-.00209	.00017	.00075	.10893
800.750	1299.600	-.11374	.00039	-.00215	.00014	.00072	.10906

RUN NO. 265/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	300.120	-.10676	-.00217	-.00173	.00026	.00115	.10584
1200.700	399.880	-.11443	.00062	-.00207	.00027	.00081	.10516
1200.600	598.770	-.11356	.00030	-.00205	.00025	.00082	.10862
1200.700	799.760	-.11359	.00032	-.00203	.00027	.00083	.10868
1201.000	1000.100	-.11350	.00030	-.00209	.00026	.00082	.10862
1200.700	1299.500	-.11346	.00030	-.00210	.00024	.00080	.10855

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = -40.000 AILRON = .000  
Y = 200.000

RUN NO. 266/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
-.505	800.330	.21035	-.02370	.02912	-.00411	.02105	.11979
.193	800.460	-.05768	-.01506	.00058	-.00019	.00332	.10272
.057	999.470	-.11448	.00075	-.00204	.00027	.00081	.10290
-.904	1298.400	-.11338	.00030	-.00208	.00026	.00081	.10864

(RTJ096) ( 31 JUL 75 )

1A13 SOURCE DATA

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

DATE 02 AUG 75

REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = -40.000 AILRC = .000  
Y = 200.000

RUN NO. 267/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
401.110	600.500	.00602	-.02671	.00457	-.00108	.01024	.10240
400.240	797.460	-.11482	.00080	-.00222	.00018	.00073	.10304
400.270	999.850	-.11343	.00036	-.00221	.00018	.00073	.10897
400.510	1300.300	-.11360	.00034	-.00222	.00019	.00074	.10904

RUN NO. 268/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.940	601.360	-.11414	.00062	-.00215	.00019	.00072	.10515
800.460	800.020	-.11328	.00034	-.00217	.00020	.00073	.10872
800.560	1000.000	-.11334	.00032	-.00221	.00019	.00073	.10886
800.450	1299.900	-.11341	.00035	-.00222	.00021	.00075	.10890

RUN NO. 269/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1201.000	600.750	-.11355	.00041	-.00214	.00020	.00074	.10800
1200.200	799.780	-.11355	.00032	-.00223	.00022	.00075	.10884
1200.700	999.810	-.11368	.00032	-.00217	.00022	.00075	.10897
1200.600	1299.700	-.11360	.00032	-.00217	.00021	.00075	.10894

31 JUL 75

IA-3. EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

## PARAMETRIC DATA

Y	•	.000	
ALPHAEVTR	•	40.000	ALIRON = .000
DALPHA	•	.000	CRETA = .000
ALPHA	•	.000	BETA = .000
MACH	•	4.000	TOTAL = 110.000

SAEF	•	2690.0000	SQ.FT.	XAPP	•	1089.5000	IN. X0
LBFF	•	1290.3000	INCHES	YAPP	•	.0000	IN. Y0
GBFF	•	1290.3000	INCHES	ZAPP	•	400.2000	IN. Z0
SCALE	•	.0100					

## REFERENCE DATA

RUN NO. 270/0 RW/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
174	2.753	-0.09844	0.02294	-0.00138	-0.00001	0.00041	0.09400
191	100.650	-0.10399	-0.00198	0.00184	0.00001	0.00008	0.11075
100	198.210	-0.08123	0.01200	-0.00312	-0.00042	0.00077	0.11118
129	301.930	-0.04768	0.00840	-0.00291	0.00015	0.00058	0.11102
142	399.750	-0.02894	-0.00231	-0.02240	0.00022	0.00093	0.11449
147	539.990	-0.10508	-0.00212	-0.00239	0.00017	0.00070	0.10761
180	799.830	-0.11275	-0.00237	-0.00237	0.00017	0.00071	0.10856
150	909.300	-0.11278	0.00034	-0.00239	0.00018	0.00071	0.10859

RUN NO. 271/ 0 RN/L • 6.59

X	Z	CN	CLM	CY	CYN	CTL	CA
400.390	-1.488	-.07328	.01558	-.00310	-.00061	.00060	.11116
400.320	100.030	-.04610	.01313	-.00304	-.00014	.00079	.10641
400.350	200.150	-.03155	.00819	-.00239	.00008	.00063	.11110
400.390	299.990	-.01399	-.00476	-.00307	.00022	.00034	.11157
400.370	399.970	-.07733	-.00614	-.00250	.00020	.00062	.10784
400.390	598.830	-.11296	.00039	-.00231	.00018	.00071	.10876
400.360	799.690	-.11284	.00034	-.00233	.00019	.00071	.10975
400.400	1000.000	-.11281	.00033	-.00230	.00019	.00071	.10975

RUN NO. 272/0 PW/L = 6.59

X	Z	CN	CLM	CY	CYN	CSL	CA
800.520	1.647	.02199	.02941	-.00284	-.00027	.00044	.10603
800.570	99.835	.01523	.00202	-.00329	.00045	.00070	.11294
800.560	200.140	-.02899	-.00743	-.00259	.00023	.00010	.10910
800.580	300.790	-.08522	-.00508	-.00239	.00028	.00072	.10706
800.500	400.050	-.11844	-.00049	-.00224	.00024	.00074	.10763
800.590	599.980	-.11267	.00030	-.00225	.00023	.00074	.10856
800.630	799.570	-.11269	.00032	-.00229	.00019	.00071	.10862
800.600	1020.100	-.11277	.00033	-.00228	.00020	.00072	.10967

DATE 02 AUG 75

1A13 SOURCE DATA

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BRPF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

RUN NO. 273/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	-711	.07443	-.00305	-.00282	.00033	.00006	.11021
1200.700	99.628	-.02016	-.00268	-.00268	.00024	.00046	.10826
1200.800	200.180	-.09016	-.00662	-.00234	.00022	.00070	.10573
1200.800	299.340	-.11281	.00046	-.00233	.00019	.00069	.10657
1200.700	399.500	-.11245	.00030	-.00230	.00018	.00059	.10801
1200.700	599.320	-.11231	.00026	-.00228	.00019	.00059	.10838
1200.800	800.170	-.11233	.00025	-.00232	.00018	.00059	.10836
1200.900	999.990	-.11234	.00027	-.00232	.00019	.00069	.10844

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = -40.000 AILRON = .000  
 Y = .000

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BRPF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
 SCALE = .0100

RUN NO. 274/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.150	299.840	.07542	.01048	-.00385	-.00031	.00040	.1427
-.028	399.650	.03005	.00154	-.00304	.00021	.00075	.11054
.176	602.400	-.05883	-.00856	-.00254	.00017	.00054	.10711
.272	800.130	-.11270	.00044	-.00234	.00016	.00068	.10651
.105	999.270	-.11226	.00026	-.00237	.00017	.00068	.10823
.031	1299.500	-.11239	.00027	-.00231	.00019	.00071	.10838

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVTR = -40.000 AILRON = .000  
 Y = .000

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ093) ( 31 JUL 75 )

RUN NO. 275/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.460	299.990	.06276	-.00500	-.00244	.00013	.00047	.10988
400.500	399.540	.01890	-.01011	-.00307	.00025	.00013	.10905
400.470	600.410	-.10680	-.00171	-.00236	.00018	.00070	.10567
400.260	799.820	-.11230	.00024	-.00234	.00018	.00070	.10819
400.440	1000.100	-.11231	.00025	-.00233	.00017	.00070	.10817
400.480	1300.300	-.11218	.00025	-.00231	.00018	.00071	.10811

DATE 02 AUG 75

1A13 SOURCE DATA

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ099) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVIR = -40.000 AIRCON = .000  
Y .000

RUN NO. 276/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.710	300.330	-.00880	-.01406	-.00264	.00024	.00045	.10559
800.800	401.080	-.08402	-.00722	-.00240	.00031	.00078	.10533
800.680	600.340	-.11204	.00028	-.00225	.00025	.00077	.10737
800.680	799.850	-.11211	.00023	-.00228	.00021	.00072	.10808
800.760	1000.200	-.11204	.00023	-.00231	.00019	.00072	.10799
800.660	1299.500	-.11220	.00024	-.00229	.00020	.00072	.10815

RUN NO. 277/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	300.030	-.09569	-.00549	-.00227	.00030	.00080	.10554
1200.700	400.080	-.11303	.00048	-.00228	.00031	.00081	.10512
1200.600	598.900	-.11216	.00021	-.00223	.00030	.00081	.10804
1200.900	799.730	-.11208	.00021	-.00223	.00029	.00080	.10799
1200.800	1000.100	-.11205	.00021	-.00222	.00029	.00080	.10799
1200.700	1299.400	-.11220	.00025	-.00223	.00023	.00075	.10823

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

1A12,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ099) ( 31 JUL 75 )

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVIR = -40.000 AIRCON = .000  
Y .000

RUN NO. 278/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
-.717	800.770	.29461	-.02133	-.00348	.00032	-.00018	.12060
.222	800.650	-.03803	-.02004	-.00249	.00039	.00080	.10130
-.019	999.640	-.11278	.00063	-.00223	.00029	.00078	.10268
-.944	1298.500	-.11189	.00021	-.00218	.00028	.00079	.10794

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 EXTERNAL TANK(110) SEPARATING FROM ORG. 09

(RTJ099) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = -40.000 AILRON = .000  
Y .000

RUN NO. 279/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
401.410	600.760	.04378	-.03618	-.00273	.00041	.00060	.09771
400.090	797.000	-.11245	.00056	-.00232	.00030	.00078	.10385
400.180	999.750	-.11145	.00021	-.00226	.00029	.00078	.10797
400.390	1300.400	-.11148	.00022	-.00227	.00029	.00077	.10808

RUN NO. 280/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
501.010	601.340	-.10936	-.00069	-.00229	.00029	.00076	.10334
800.540	800.150	-.11153	.00028	-.00225	.00025	.00075	.10771
500.640	1000.300	-.11143	.00023	-.00226	.00027	.00076	.10816
800.510	1299.700	-.11152	.00023	-.00228	.00027	.00076	.10818

RUN NO. 281/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	600.760	-.11240	.00060	-.00232	.00028	.00075	.10382
1200.200	798.880	-.11162	.00024	-.00232	.00027	.00075	.10821
1200.500	999.580	-.11163	.00024	-.00233	.00026	.00075	.10820
1200.600	1299.700	-.11156	.00024	-.00235	.00025	.00074	.10821

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(31)75 (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .030  
 DALPHA = 5.000 DBETA = .030  
 ELEVTR = .000 ATTENON = .030  
 Y = .000

RUN NO. 1/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.290	-3.008	.04455	.02191	.00034	-.00028	.00005	.08991
.225	100.860	.04146	.02484	.00013	-.00035	.00005	.08992
.388	199.270	.05469	.02395	.00003	-.00027	.00005	.08968
.440	202.500	.05013	.02263	-.00006	-.00010	.00005	.08977
.398	404.700	.05953	.02194	-.00005	-.00022	.00004	.08981
.180	600.870	.05567	.02163	-.00024	-.00025	.00004	.08949

RUN NO. 2/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.480	-1.597	.04422	.01310	.00071	.00019	.00005	.09018
400.330	101.140	.03630	.02477	-.00004	-.00041	.00004	.08952
400.390	198.800	.04984	.02512	-.00001	-.00031	.00005	.08925
400.290	299.910	.05427	.02241	-.00014	-.00025	.00005	.08961
400.300	396.120	.05542	.02133	-.00014	-.00019	.00005	.08984
400.290	599.920	.05356	.02132	.00007	-.00021	.00005	.08933

RUN NO. 3/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.610	-.369	.02794	-.00173	.00185	.00057	.00005	.09765
800.580	100.270	.02549	.02221	.00085	.00013	.00004	.08887
800.570	203.180	.04433	.02230	-.00008	-.00017	.00004	.08891
800.570	299.960	.04860	.02350	.00012	-.00010	.00005	.08998
800.660	399.870	.05382	.02202	.00010	-.00003	.00005	.08969
800.610	599.680	.05327	.02172	.00040	-.00003	.00005	.08955

RUN NO. 4/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.500	.139	.02681	.00466	.00036	.00003	.00005	.10328
1200.500	99.666	.02296	.01174	.00039	.00022	.00005	.09656
1200.700	200.160	.04315	.01868	.00021	.00001	.00004	.08947
1200.700	299.390	.04515	.02169	-.00008	-.00015	.00005	.08955
1200.800	399.400	.04815	.02312	.00014	-.00008	.00005	.08960
1200.700	599.690	.05411	.02231	.00031	-.00008	.00004	.08966

(RTJT02) ( 31 JUL 75 )

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 08

1A13 SOURCE DATA

DATE 02 AUG 75

PARAMETRIC DATA

MACH = 4.530 PTC = 110.000  
ALPHA = .000 BE = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = .000  
Y = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

RUN NO. 5/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
.046	2.930	-.01709	-.00274	.00042	-.00027	.00004	.08946
-.024	100.670	-.01503	-.00058	.00012	-.00024	.00004	.08888
.029	197.930	-.01556	.00432	.00040	-.00038	.00004	.08759
.076	301.710	-.00126	.00004	.00022	-.00022	.00004	.08616
.105	399.860	-.00062	-.00026	.00039	-.00020	.00004	.08601
.156	599.840	-.00225	-.00116	.00034	-.00011	.00004	.08616
.096	799.430	-.00295	-.00081	.00013	-.00007	.00004	.08581
.035	1000.500	-.00709	-.00171	.00033	-.00001	.00004	.08684

RUN NO. 6/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
400.180	-1.699	-.00968	-.01770	.00079	.00048	.00005	.08773
400.310	100.250	-.01884	-.00361	.00069	-.00020	.00004	.08936
400.260	200.060	-.02274	.00564	.00063	-.00032	.00004	.08746
400.360	296.910	-.00675	.00274	.00026	-.00020	.00004	.08645
400.380	399.920	-.00351	-.00016	.00019	-.00015	.00004	.08677
400.300	599.630	-.00215	-.00104	.00016	-.00012	.00004	.08621
400.430	799.980	-.00238	-.00027	.00039	-.00011	.00004	.08597
400.410	1000.100	-.00358	-.00090	-.00003	-.00007	.00004	.08550

RUN NO. 7/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
800.460	1.704	-.04194	-.04187	.00280	.00109	.00005	.09981
800.470	99.966	-.02743	-.01140	.00126	.00006	.00004	.08882
800.510	200.090	-.02767	.00366	.00031	-.00001	.00004	.08816
800.440	300.950	-.01003	-.00010	.00002	-.00008	.00004	.08746
800.520	400.080	-.00819	.00093	.00016	-.00005	.00004	.08598
800.470	599.930	-.00171	-.00062	.00055	-.00001	.00004	.08592
800.600	799.600	-.00283	-.00018	.00023	-.00013	.00004	.08637
800.450	1000.000	-.00410	-.00144	-.00007	-.00012	.00005	.08584

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OF POOR QUALITY



DATE 02 AUG 75

IA13 SOURCE DATA

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IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ03) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 8/ 0 RN/L = 5.61

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	-1.248	-0.04925	-0.03482	.00202	-.00054	.00005	.07788
1200.700	99.731	-0.03681	-0.01681	.00141	.00013	.00004	.05782
1200.700	200.050	-0.01525	-0.00550	.00082	.00017	.00005	.08882
1200.700	299.320	-0.01050	-0.00226	.00046	.00010	.00004	.08846
1200.800	399.500	-0.00911	-0.00037	.00014	.00004	.00004	.08736
1200.800	599.310	-0.00319	.00044	.00025	.00000	.00004	.08634
1200.800	800.260	-0.00417	-0.00097	-.00019	-.00014	.00004	.08654
1200.800	1000.000	-0.00394	-0.00194	.00034	-.00017	.00004	.08518

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ03) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = 200.000

RUN NO. 12/ 0 RN/L = 6.81

X	Z	CN	CLM	CY	CYN	CBL	CA
-0.003	.734	-0.01741	.00094	-.00075	-.00112	.00004	.08851
.079	103.180	-0.01628	.00135	-.00080	.00081	.00004	.08763
.200	199.750	-0.00987	.00367	-.00307	.00189	.00004	.08662
.012	300.210	.00049	-0.00048	.00110	.00024	.00004	.08579
.175	397.220	.00025	.00004	.00103	.00006	.00005	.08607
.183	600.110	-0.00244	-0.00121	.00054	-.00018	.00005	.08610
.137	799.940	-0.00199	-0.00046	.00065	-.00013	.00004	.08555
.213	1000.000	-0.00302	-0.00057	.00022	-.00028	.00005	.08683

(RTJ03) ( 31 JUL 75 )

DATE 02 AUG 75 1A13 SOURCE DATA 1A13,EXTERNAL TANK(I)SEPARATING FROM ORB. 09

REFERENCE DATA  
SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100  
MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 ALLRON = .000  
Y = 200.000

PARAMETRIC DATA

RUN NO. 11/ 0		RN/L = 6.61	
X	Z	CN	CLM
400.330	-181	-0.1390	-0.0764
400.370	101.650	-0.1878	.00038
400.360	203.320	-0.1725	.00438
400.340	303.760	-0.0705	.00166
400.320	400.860	-0.0148	-0.0085
400.320	500.130	-0.0214	-0.0106
400.330	799.710	-0.0205	-0.0026
400.380	999.760	-0.0330	-0.0083

RUN NO. 10/ 0		RN/L = 6.61	
X	Z	CN	CLM
800.510	-4.261	-0.1663	-0.01890
800.440	100.160	-0.0236	-0.0585
800.470	200.160	-0.0266	.00587
800.520	299.940	-0.0944	.00086
800.540	399.530	-0.0698	.00088
800.520	599.770	-0.0186	-0.0093
800.580	799.980	-0.0306	-0.0034
800.580	1000.200	-0.0374	-0.0141

RUN NO. 9/ 0		RN/L = 6.61	
X	Z	CN	CLM
1200.7	.378	-0.4755	-0.3160
1200.800	100.340	-0.0239	-0.1669
1200.700	200.370	-0.1070	-0.0496
1200.700	300.510	-0.1206	-0.0068
1200.700	400.470	-0.0861	.00039
1200.800	599.630	-0.0176	.00004
1200.800	799.740	-0.0407	-0.0095
1200.800	999.900	-0.0341	-0.0180

CY		CYN		CBL		CA	
-0.0741	-0.0426	-0.0043	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0767	-0.0043	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0488	-0.0134	-0.0075	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0186	-0.0009	-0.0007	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0040	-0.0013	-0.0007	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0083	-0.0013	-0.0007	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0091	-0.0013	-0.0007	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0051	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003

CY		CYN		CBL		CA	
-0.1485	-0.1026	-0.0740	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0253	-0.0074	-0.0046	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0215	-0.0081	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
-0.0066	-0.0020	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
-0.0076	-0.0019	-0.0019	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0104	-0.0024	-0.0024	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0079	-0.0024	-0.0024	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004

CY		CYN		CBL		CA	
-0.0241	-0.00678	-0.0440	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
-0.0542	-0.0040	-0.00203	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0065	-0.00087	-0.0045	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0138	-0.0032	-0.0032	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
-0.0050	-0.0031	-0.0031	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
-0.0071	-0.0017	-0.0017	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
-0.0059	-0.0017	-0.0017	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005

DATE 02 AUG 75

IATJ SOURCE DATA

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IATJ, EXTERNAL TANK(110)SEPARATING FROM ORB. 09

INTJCN ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ FT. XMRP = 1463.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOAL = 110.000  
 ALPHA = .000 BETA = .000  
 OALPHA = .000 LBETA = 5.000  
 ELEVR = .000 AIRRN = 0.00  
 Y = 200.000

RUN NO. 13/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.088	.848	-.02029	-.00028	-.07487	-.02187	.00005	.03000
.024	100.430	-.01630	.00050	-.06695	-.02217	.00004	.08910
.128	199.810	-.01514	.00487	-.06056	-.02243	.00004	.08958
.044	302.500	-.00099	-.00033	-.05891	-.02373	.00005	.08748
.012	400.050	-.00103	-.00030	-.05860	-.02358	.00005	.08819
.101	599.900	-.00225	-.00103	-.05857	-.02360	.00005	.08823
.107	799.860	-.00225	-.00035	-.05839	-.02341	.00004	.08788
.032	999.840	-.00308	-.00052	-.05853	-.02378	.00005	.08922

RUN NO. 14/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.280	-.903	-.01672	-.01098	-.08387	-.02620	.00007	.08331
400.330	100.200	-.01989	-.00113	-.07252	-.02204	.00005	.08964
400.240	198.090	-.01955	.00596	-.06275	-.02160	.00004	.08948
400.360	300.090	-.00867	.00231	-.05951	-.02332	.00005	.08842
400.350	400.040	-.00336	-.00051	-.05807	-.02372	.00005	.08912
400.290	599.730	-.00272	-.00117	-.05824	-.02335	.00005	.08828
400.330	799.720	-.00265	-.00033	-.05872	-.02364	.00005	.08816
400.350	1000.200	-.00395	-.00094	-.05777	-.02361	.00004	.08854

RUN NO. 15/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.430	-.110	-.02448	-.02312	-.08868	-.03609	.00008	.09070
800.560	99.904	-.02274	-.00733	-.07715	-.02338	.00005	.08998
800.540	200.070	-.02670	.00393	-.06370	-.02343	.00004	.08901
800.500	300.650	-.01147	-.00007	-.06181	-.02256	.00005	.08919
800.530	400.130	-.00983	.00072	-.05913	-.02315	.00005	.08879
800.550	599.950	-.00323	-.00118	-.05848	-.02326	.00005	.08792
800.540	799.540	-.00362	-.00049	-.05820	-.02345	.00004	.08830
800.560	1000.100	-.00477	-.00165	-.05763	-.02326	.00005	.08755

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 08

(RTJ104) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 16/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	1.862	-.05343	-.03233	-.08473	-.03689	.00006	.10485
1200.900	99.687	-.03200	-.01647	-.07535	-.02823	.00005	.09529
1200.700	200.000	-.01065	-.00509	-.06454	-.02548	.00005	.08906
1200.700	299.630	-.01045	-.00205	-.06303	-.02354	.00006	.08945
1200.800	399.470	-.00968	-.00004	-.06143	-.02262	.00005	.08886
1200.800	599.460	-.00305	.00018	-.05851	-.02360	.00005	.08791
1200.700	800.190	-.00421	-.00093	-.05035	-.02350	.00005	.08846
1200.800	1000.100	-.00332	-.00165	-.05762	-.02309	.00005	.08710

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = 5.000  
 ELEVR = .000 AILRON = .000  
 Y = 200.000

1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 08

(RTJ105) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 20/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
-.057	.791	-.01761	-.00089	-.06404	-.02127	.00005	.08971
.046	98.984	-.01567	.00037	-.05891	-.02302	.00005	.08987
.117	199.420	-.01403	.00448	-.05521	-.02498	.00004	.08868
.129	301.810	-.00015	-.00021	-.05939	-.02396	.00005	.08758
.153	308.300	.00039	.00013	-.05932	-.02365	.00005	.08825
.097	600.250	-.00258	-.00118	-.05898	-.02365	.00005	.08794
.084	799.880	-.00209	-.00042	-.05911	-.02339	.00005	.08758
.190	1000.200	-.00439	-.00085	-.05904	-.02378	.00005	.08869

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = 5.000  
 ELEVR = .000 AILRON = .000  
 Y = .000

DATE 02 AUG 75

IA13 SOURCE DATA

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( 31 JUL 75 )

IA13, EXTERNAL TANK(T110) SEPARATING FROM ORB. 09

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.150 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = .000 ALTORCA = .000  
 Y = .000

RUN NO. 19/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.480	-282	-01589	-01670	-07508	-01969	.00008	.08944
400.250	101.810	-02275	-00198	-06242	-02073	.00005	.08941
400.330	199.790	-02027	.00589	-05571	-02398	.00004	.08905
400.490	299.910	-00749	.00212	-05715	-02441	.00004	.08793
400.370	401.290	-00254	-00087	-05907	-02395	.00005	.08710
400.430	600.650	-00242	-00097	-05919	-02359	.00005	.08790
400.350	799.660	-00232	-00032	-05893	-02353	.00005	.08768
400.450	999.870	-00338	-00078	-05847	-02353	.00005	.08831

RUN NO. 18/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.570	1931	-04184	-04080	-07189	-02503	.00008	.09998
800.540	100.230	-02907	-01001	-07019	-02047	.00005	.08948
800.570	199.970	-02802	.00453	-06134	-02235	.00005	.08978
800.510	300.110	-01079	.00042	-05913	-02310	.00005	.08940
800.500	399.920	-00811	.00104	-05749	-02411	.00005	.08944
800.650	599.860	-00208	-00077	-05308	-02333	.00005	.08789
800.620	799.770	-00272	-00013	-05922	-02373	.00005	.08922
800.600	1000.100	-00333	-00115	-05792	-02347	.00005	.08746

RUN NO. 17/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.600	1.160	-04933	-03637	-05784	-03203	.00008	.10966
1200.700	100.490	-03403	-01906	-06651	-02490	.00006	.09791
1200.700	200.690	-01451	-00614	-06385	-02325	.00005	.08989
1200.600	300.480	-01216	-00170	-06207	-02226	.00005	.08938
1200.700	400.590	-00969	-00007	-05872	-02282	.00005	.08833
1200.700	599.640	-00247	.00018	-05920	-02395	.00005	.08778
1200.700	799.720	-00340	-00053	-05980	-02377	.00004	.08852
1200.800	999.650	-00335	-00166	-05945	-02346	.00005	.08703

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13, EXTERNAL TANK (10) SEPARATING FROM ORB. 79

(RTJ06) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0102

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = .000  
ELEVTR = .000 AILTRON = .000  
Y = .000

RUN NO. 21/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.117	199.110	-.08716	-.01928	-.00007	-.00019	.00004	.08904
.111	301.420	-.07875	-.01615	.00007	-.00024	.00003	.08189
.011	399.810	-.06185	-.02221	-.00037	-.00017	.00004	.08790
.063	600.700	-.06241	-.02430	-.00028	-.00011	.00004	.08840
.199	799.930	-.06097	-.02383	-.00009	-.00005	.00005	.08785
.097	899.320	-.06218	-.02351	-.00018	-.00005	.00005	.08915
.502	1300.300	-.06440	-.02592	-.00048	-.00024	.00005	.08807

RUN NO. 22/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.310	199.820	-.09396	-.02050	-.00020	-.00027	.00004	.08998
400.280	300.200	-.08694	-.01448	.00014	-.00029	.00004	.08798
400.330	399.880	-.07050	-.02087	-.00022	-.00019	.00004	.08777
400.330	599.810	-.06184	-.02462	-.00011	-.00004	.00004	.08789
400.400	799.900	-.06207	-.02361	-.00028	-.00010	.00005	.08791
400.450	1000.300	-.06421	-.02410	-.00016	-.00002	.00005	.08874
400.520	1300.200	-.06343	-.02571	-.00027	-.00011	.00005	.08761

RUN NO. 23/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.510	200.390	-.09654	-.02562	.00048	.00000	.00004	.08940
800.540	302.760	-.09531	-.01960	.00010	.00004	.00004	.08898
800.620	400.420	-.07193	-.02313	-.00008	-.00006	.00004	.08835
800.510	600.010	-.06419	-.02299	-.00017	-.00006	.00004	.08776
800.440	799.760	-.06284	-.02360	-.00025	-.00003	.00005	.08843
800.500	1000.030	-.06433	-.02440	-.00009	-.00011	.00005	.08786
800.610	1299.700	-.06240	-.02492	-.00030	-.00001	.00005	.08755

RUN NO. 24/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	199.860	-.09326	-.02970	.00058	.00000	.00004	.09305
1200.600	297.210	-.07089	-.02045	-.00006	.00008	.00005	.08939
1200.600	399.690	-.07267	-.02463	.00028	.00001	.00004	.08903
1200.700	599.070	-.06855	-.02144	.00003	.00011	.00005	.08798
1200.700	800.140	-.06405	-.02433	-.00063	-.00013	.00004	.08938
1200.700	1000.100	-.06508	-.02504	-.00008	-.00006	.00005	.08727
1200.600	1299.600	-.06205	-.02410	-.00010	.00002	.00005	.08761

1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ07) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

## PARAMETER DATA

MACH = 4.530 PIGTAL = 110.300  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = .000 AIRRON = .000  
Y = .000

RUN NO. 25/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.057	299.870	-.19440	-.02338	-.00007	-.00059	.00002	.08801
-.118	399.570	-.15557	-.03364	-.00049	-.00043	.00003	.08969
.108	602.610	-.13971	-.04581	-.00038	-.00027	.00004	.09051
.241	800.210	-.13693	-.04521	.00001	-.00018	.00004	.09029
.008	999.310	-.13800	-.04468	-.00014	-.00011	.00004	.09151
-.029	1299.500	-.14199	-.04670	-.00024	-.00020	.00004	.09069

RUN NO. 26/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.430	300.010	-.19734	-.02925	-.00005	-.00039	.00002	.09109
400.450	399.490	-.16614	-.03454	-.00038	-.00035	.00003	.08899
400.340	600.490	-.14684	-.04478	-.00026	-.00018	.00004	.09001
400.340	800.040	-.14286	-.04640	-.00005	-.00016	.00003	.09025
400.230	999.620	-.14002	-.04512	.00007	-.00009	.00004	.09136
400.400	1300.400	-.14195	-.04672	.00001	-.00019	.00004	.09032

RUN NO. 27/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.590	300.180	-.18192	-.04093	-.00029	-.00026	.00003	.08881
800.700	401.080	-.15770	-.04371	-.00018	-.00016	.00003	.09038
800.620	600.210	-.14908	-.04244	-.00008	-.00008	.00003	.09060
800.640	799.760	-.13969	-.04530	-.00003	-.00019	.00004	.09081
800.690	1000.100	-.14244	-.04567	-.00006	-.00020	.00004	.09067
800.580	1299.700	-.14002	-.04584	-.00028	-.00012	.00004	.09061

RUN NO. 28/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	300.080	-.17621	-.04048	-.00002	.00004	.00003	.09103
1200.700	399.980	-.15397	-.04795	.00007	-.00012	.00004	.09064
1200.500	598.710	-.14900	-.04307	-.00006	-.00006	.00003	.09032
1200.700	799.760	-.14438	-.04371	-.00048	-.00029	.00003	.09105
1200.800	1000.300	-.14277	-.04584	-.00061	-.00024	.00004	.09021
1200.700	1299.500	-.13952	-.04486	-.00009	-.00012	.00004	.09050

DATE 02 AUG 75

1A13 SOURCE DATA

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJTOB) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2650.000 SQ.FT. XMRP = 1403.000 IN. XT  
 LREF = 1290.300 INCHES YMRP = .000 IN. YT  
 BREF = 1290.300 INCHES ZMRP = 400.000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = 200.000

RUN NO. 32/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.062	299.180	-.18888	-.02885	-.01140	.00359	.00002	.08797
.149	399.940	-.14234	-.03771	-.00483	.00192	.00003	.08923
.263	600.050	-.13614	-.04438	-.00006	-.00026	.00004	.09052
.222	798.100	-.13751	-.04448	.00004	-.00025	.00004	.09049
.209	1000.100	-.13792	-.04448	.00011	-.00029	.00004	.09164
.366	1300.900	-.14333	-.04692	.00037	-.00025	.00004	.09070

RUN NO. 31/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.260	300.140	-.18175	-.02975	-.00920	.00119	.00001	.09141
400.310	399.980	-.15891	-.03514	-.00450	.00073	.00003	.08926
400.370	600.050	-.13911	-.04435	-.00034	.00023	.00004	.09042
400.350	799.670	-.13700	-.04429	.00001	-.00014	.00004	.09062
400.350	999.740	-.13862	-.04449	.00002	-.00018	.00004	.09161
400.370	1300.200	-.13957	-.04577	.00037	-.00016	.00004	.09044

RUN NO. 30/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.620	300.380	-.18199	-.03994	-.00226	-.00120	.00002	.09075
800.690	400.030	-.15689	-.04253	-.00157	-.00073	.00003	.09143
800.420	599.160	-.14708	-.04206	-.00132	.00088	.00004	.09092
800.560	799.850	-.13857	-.04488	.00043	-.00007	.00004	.09113
800.730	1000.300	-.14132	-.04509	.00083	.00012	.00004	.09075
800.650	1299.800	-.13837	-.04531	.00038	-.00016	.00004	.09018

RUN NO. 29/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	299.910	-.16439	-.04363	-.00789	.00266	.00003	.09023
1200.900	400.030	-.15340	-.04697	-.00076	-.00112	.00004	.09073
1200.700	600.030	-.14913	-.04184	-.00069	.00014	.00003	.09066
1200.800	799.820	-.14222	-.04448	.00021	.00042	.00004	.09116
1200.900	1000.500	-.14203	-.04558	.00069	.00009	.00004	.09020
1200.800	1299.800	-.13805	-.04480	.00035	-.00001	.00003	.09069

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DATE 02 AUG 75

IA13 SOURCE DATA

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IA13, EXTERNAL TANK (T10) SEPARATING FROM ORB. 09

(RTJF75) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOIAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = 5.000  
 ELEVTR = .000 AILRON = .000  
 Y = 200.000

RUN NO. 33/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.033	300.160	-.18988	-.02196	-.08026	-.01811	.00001	.08794
-.081	399.610	-.15280	-.03444	-.07189	-.02062	.00002	.08919
.245	602.350	-.14111	-.04458	-.06921	-.02198	.00004	.09104
.204	800.040	-.14110	-.04403	-.06897	-.02197	.00003	.09106
.043	999.300	-.14022	-.04382	-.06952	-.02204	.00003	.09205
.115	1299.900	-.14429	-.04586	-.06871	-.02194	.00003	.09129

RUN NO. 34/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.510	300.060	-.19537	-.02697	-.08290	-.01863	.00001	.09144
400.340	399.810	-.16335	-.03469	-.07280	-.02127	.00001	.09021
400.440	600.320	-.14481	-.04282	-.06962	-.02179	.00003	.09081
400.310	799.940	-.14067	-.04392	-.06917	-.02172	.00003	.09135
400.410	1000.100	-.14085	-.04386	-.06951	-.02190	.00003	.09195
400.500	1300.300	-.14206	-.04508	-.06825	-.02189	.00003	.09105

RUN NO. 35/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.420	300.190	-.18194	-.03851	-.07608	-.02172	.00002	.08977
800.700	400.940	-.15683	-.04233	-.07268	-.02202	.00002	.09165
800.530	600.290	-.14911	-.04064	-.07036	-.02091	.00003	.09110
800.540	799.790	-.13897	-.04346	-.06948	-.02174	.00003	.09128
800.600	1000.100	-.14148	-.04373	-.06911	-.02161	.00003	.09113
800.400	1299.700	-.13985	-.04415	-.06829	-.02165	.00003	.09072

RUN NO. 36/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	300.460	-.17448	-.03854	-.07742	-.02151	.00002	.09117
1200.700	400.120	-.15326	-.04655	-.07275	-.02245	.00003	.09142
1200.500	598.800	-.14986	-.04153	-.07196	-.02096	.00003	.09130
1200.700	799.690	-.14390	-.04226	-.06963	-.02165	.00003	.09145
1200.800	1000.300	-.14215	-.04409	-.06920	-.02147	.00003	.09065
1200.700	1299.600	-.13868	-.04329	-.06835	-.02161	.00004	.09113

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 EXTERNAL TANK (110) SEPARATING FROM ORB. 09

(RTJ110) (31 JUL 75)

## REFERENCE DATA

SREF = 2600.0000 SQ. FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = 5.000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 40 0 RN/L = 6.57

X	Z	CM	CLM	CY	CYN	CBL	CA
-043	299.410	-18231	-02527	-06471	-02295	.00002	.08829
.063	400.060	-14963	-03456	-06567	-02372	.00003	.08941
.220	553.800	-13907	-04398	-06949	-02207	.00004	.09094
.088	797.370	-13869	-04331	-06871	-02186	.00003	.09083
.149	1000.100	-13858	-04318	-07021	-02204	.00003	.09189
.248	1300.700	-14259	-04521	-06999	-02216	.00003	.09127

RUN NO. 39 0 RN/L = 6.57

X	Z	CM	CLM	CY	CYN	CBL	CA
400.200	300.190	-19634	-02638	-06972	-02093	.00002	.09167
400.300	400.490	-16418	-03335	-06885	-02223	.00002	.08986
400.390	600.120	-14203	-04299	-06913	-02247	.00004	.09065
400.360	799.770	-13861	-04321	-06968	-02181	.00003	.09076
400.330	999.630	-13995	-04358	-06982	-02193	.00003	.09161
400.350	1300.300	-14440	-04482	-06959	-02181	.00004	.09085

RUN NO. 38 0 RN/L = 6.57

X	Z	CM	CLM	CY	CYN	CBL	CA
800.550	300.400	-18272	-03942	-07448	-02057	.00003	.09041
800.530	400.040	-15893	-04115	-07218	-02100	.00003	.09173
800.310	599.000	-14849	-04048	-06894	-02199	.00003	.09083
800.470	799.810	-13909	-04338	-07025	-02197	.00003	.09106
800.570	1000.400	-14146	-04376	-07006	-02187	.00003	.09095
800.510	1299.900	-13933	-04394	-06864	-02170	.00003	.09032

RUN NO. 37 0 RN/L = 6.57

X	Z	CM	CLM	CY	CYN	CBL	CA
1200.600	299.780	-16937	-04114	-08724	-02344	.00003	.09122
1200.900	401.360	-15370	-04640	-07337	-02082	.00003	.09086
1200.800	600.290	-15015	-04107	-07057	-02127	.00003	.09092
1200.800	799.790	-14289	-04289	-06990	-02228	.00003	.09143
1200.900	1000.400	-14230	-04404	-06953	-02170	.00003	.09057
1200.800	1299.900	-13870	-04321	-06942	-02192	.00004	.09090

1A13, EXTERNAL TANK (110) SEPARATING FROM ORB. 09

(RTJ11) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0002 SQ.FT. XMRP = .103.0000 IN. Y  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = .000 AILRON = .000  
Y = .000

RUN NO. 41/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
-876	600.520	-.34777	-.06247	-.00034	-.00038	.00000	.08897
.132	800.580	-.32362	-.06112	-.00048	-.00021	.00001	.09542
-.055	999.450	-.32278	-.07996	-.00040	-.00025	.00001	.09644
-1.022	1298.400	-.32578	-.08203	-.00038	-.00035	.00002	.09629

RUN NO. 42/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
401.340	600.760	-.36344	-.06337	-.00004	-.00023	.00000	.09303
400.150	799.900	-.33474	-.07550	-.00011	-.00030	.00001	.09502
400.380	1000.100	-.32434	-.06037	.00011	-.00010	.00001	.09635
400.500	1300.400	-.32628	-.08166	-.00046	-.00029	.00001	.09577

RUN NO. 43/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.910	601.380	-.34381	-.07945	.00034	-.00015	.00001	.09463
800.480	800.020	-.33777	-.07450	.00034	-.00024	.00002	.09569
800.600	1000.100	-.32493	-.08116	-.00051	-.00030	.00001	.09568
800.350	1299.800	-.32501	-.08059	-.00002	-.00019	.00001	.09522

RUN NO. 44/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	600.810	-.34159	-.08236	.00062	-.00005	.00001	.09545
1200.200	799.050	-.34134	-.07603	.00016	-.00026	.00001	.09636
1200.600	999.700	-.33472	-.07693	-.00030	-.00034	.00002	.09508
1200.800	1299.700	-.32383	-.07948	-.00019	-.00027	.00001	.09521

DATE 02 AUG 75

1A13 SOURCE DATA

1A13,EXTERNAL TAN.(TID)SEPARATING FROM ORB. 09

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. YT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = 200.000

RUN NO. 46/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
-503	599.780	-33357	-07161	-00669	.00242	.00001	.09279
.725	800.720	-32556	-08154	-00009	-00032	.00001	.09540
.104	999.890	-32580	-08055	.00019	-00019	.00001	.09662
.234	1300.400	-32723	-08221	.00054	-00025	.00002	.09610

RUN NO. 47/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.530	602.380	-35132	-07084	-00435	.00072	.00000	.09354
400.340	800.150	-33033	-07761	-00191	.00105	.00001	.09509
400.180	999.530	-32438	-08054	.00006	-00033	.00002	.09653
400.530	1300.300	-32662	-08171	.00039	-00024	.00002	.09571

RUN NO. 48/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.210	599.530	-34823	-07588	-00081	-00035	.00001	.09504
800.210	799.130	-33744	-07477	-00173	.00101	.00001	.09576
800.620	1000.200	-32505	-08134	.00065	-00009	.00002	.09573
800.410	1299.900	-32576	-08092	.00091	-00008	.00002	.09548

RUN NO. 45/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1201.000	601.480	-34364	-08178	.00020	-00080	.00001	.09674
1200.700	800.490	-34466	-07419	-00069	-00009	.00001	.09641
1200.900	1000.300	-33251	-07808	-00060	.00067	.00002	.09507
1200.800	1300.100	-32442	-07980	.00083	-00006	.00001	.09559

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DATE 02 AUG 75

IA13 SOURCE DATA

IA13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 08

(RTJT13) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = 5.000  
ELEVTR = .000 AILRON = .000  
Y = 200.000

RUN NO. 48/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
-706	600.830	-34810	-06370	-08597	-01910	-00002	.08987
.133	800.510	-32625	-08053	-08232	-02041	.00000	.09568
-.157	999.450	-32650	-07956	-08253	-02054	.00000	.09691
-.068	1300.000	-32958	-08163	-08277	-02048	.00000	.09651

RUN NO. 50/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
401.230	600.710	-36464	-06829	-08678	-01964	-00002	.09285
400.230	800.070	-33806	-07523	-08361	-01953	.00000	.09541
400.410	1000.000	-32758	-08002	-08285	-02053	.00000	.09684
400.350	1300.300	-32901	-08096	-08186	-02020	.00000	.09589

RUN NO. 51/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.840	601.380	-34780	-07824	-08607	-02027	.00000	.09470
800.420	800.120	-34188	-07429	-08516	-01920	-00001	.09624
800.470	1000.200	-32765	-08067	-08269	-02026	.00000	.09606
800.490	1299.900	-32847	-08023	-08154	-02014	.00000	.09563

RUN NO. 52/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.600	600.760	-34551	-08163	-08439	-02083	.00000	.09605
1200.200	798.970	-34535	-07539	-08535	-01937	-00001	.09662
1200.600	998.680	-33763	-07650	-08396	-01951	-00001	.09530
1200.700	1299.900	-32814	-07943	-08199	-02007	.00000	.09576

DATE 02 AUG 75

## IA13 SOURCE DATA

IA13, EXTERNAL TANK(T10) SEPARATING FROM ORB. 09

(RTJ14) (31 JUL 75)

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## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XRRP = 11403.0000 IN. XT  
LREF = 1290.3000 INCHES YRRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = 5.000  
ELEVTR = .000 AILRON = .000  
Y = .000

RUN NO. 56/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
-1.921	599.420	-1.34227	-1.06625	-1.07829	-1.02246	-1.00001	.09063
.861	800.700	-1.32752	-1.08072	-1.08279	-1.02044	.00000	.09534
.026	999.500	-1.32793	-1.07971	-1.08368	-1.02054	.00000	.09657
.262	1300.500	-1.32901	-1.08144	-1.08367	-1.02063	.00000	.09609

RUN NO. 55/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.550	803.180	-1.35871	-1.06987	-1.08272	-1.02064	-1.00002	.09254
400.230	800.140	-1.33439	-1.07569	-1.08163	-1.02115	-1.00001	.09501
400.070	999.640	-1.32701	-1.07978	-1.08346	-1.02039	.00000	.09650
400.230	1300.300	-1.32868	-1.08087	-1.08327	-1.02039	.00000	.09577

RUN NO. 54/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.340	599.600	-1.34905	-1.07681	-1.08616	-1.01920	.00000	.09446
800.060	799.090	-1.34052	-1.07378	-1.08387	-1.02045	-1.00001	.09580
800.520	1000.100	-1.32755	-1.08065	-1.08422	-1.02069	.00000	.09578
800.600	1300.000	-1.32806	-1.08001	-1.08234	-1.02022	.00000	.09531

RUN NO. 53/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1201.000	601.520	-1.34558	-1.08145	-1.08629	-1.01925	.00000	.09617
1200.900	800.540	-1.34631	-1.07433	-1.08608	-1.01987	.00000	.09633
1200.800	1000.400	-1.33618	-1.07682	-1.08331	-1.02069	.00000	.09520
1200.600	1299.800	-1.32654	-1.07877	-1.08312	-1.02038	.00000	.09545

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ115) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -30.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 57/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
-3.234	1297.500	-57959	-11279	-00067	-00044	-00001	10375

RUN NO. 58/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.170	1300.300	-58088	-11222	-00078	-00032	-00001	10329

RUN NO. 59/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.330	1300.000	-57923	-11179	-00057	-00022	-00002	10255

RUN NO. 60/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.400	1300.000	-58250	-10885	-00087	-00030	-00002	10154

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ116) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = 5.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 61/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
.228	.082	-01364	-00524	00050	-00023	00004	08891
.177	97.977	-02036	-00119	00089	-00019	00004	08799
.271	203.270	-01198	-00028	00036	-00027	00004	08682
.288	304.300	-00783	-00287	00041	-00013	00004	08584
.236	400.000	-00762	-00218	00035	-00009	00004	08643
.116	600.840	-00957	-00335	00043	-00011	00004	08721

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.EXTERNAL TANK(T10)SEPARATING FROM C7B. 09

(RTJ16) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 113.000  
ALPHA = -5.000 BETA = .000  
DALPHA = 5.000 DBETA = .000  
ELEVTR = .000 AILRON = .000  
Y = .000

RUN NO. 62/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
400.460	-974	-0.0877	-0.01416	.00052	.00019	.00005	.09097
400.530	100.140	-0.01726	-0.00331	.00039	-0.00028	.00004	.08990
400.310	199.990	-0.01205	-0.00191	.00011	-0.00016	.00004	.08770
400.480	300.080	-0.01364	.00029	.00039	-0.00027	.00004	.08704
400.380	398.860	-0.00889	-0.00065	.00028	-0.00025	.00004	.08687
400.440	600.210	-0.00727	-0.00271	.00002	-0.00019	.00004	.08688

RUN NO. 63/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.590	-391	-0.01245	-0.02580	.00097	.00051	.00005	.10279
800.700	100.430	-0.02098	-0.00827	.00039	.00011	.00004	.09206
800.730	201.910	-0.00867	-0.00760	.00030	.00001	.00004	.08867
800.610	300.180	-0.01274	-0.00317	.00040	-0.00009	.00004	.08851
800.630	400.060	-0.01435	-0.00004	.00004	-0.00019	.00004	.08791
800.670	600.080	-0.00761	-0.00307	.00014	-0.00022	.00004	.08603

RUN NO. 64/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.600	.165	.00080	.00495	-0.00079	-0.00122	.00004	.08880
1200.600	97.754	-0.00452	-0.00765	.00036	-0.00018	.00004	.10059
1200.700	198.440	-0.00817	-0.01251	.00036	.00009	.00005	.09568
1200.900	298.180	-0.00785	-0.00755	.00035	-0.00003	.00004	.08980
1200.900	399.970	-0.01315	-0.00450	.00029	-0.00018	.00004	.08920
1200.900	599.560	-0.01354	-0.00151	.00010	-0.00030	.00004	.08658



DATE 02 AUG 75

1A13 SOURCE DATA

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1A13, EXTERNAL TANK(110) SEPARATING FROM ORB. 09

(RTJ17) (31 JUL 75)

## REFERENCE DATA

SPREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRPF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## ARAMEPIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = 5.000 BETA = .000  
 CALPHA = .000 CBETA = .000  
 ELEVEN = .000 ALEVEN = .000  
 Y = .000

RUN NO. 65/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.155	1.116	-.07676	-.03158	-.00004	-.00009	.00003	.03151
.240	96.495	-.07982	-.02636	.00042	.00011	.00004	.00077
.234	203.120	-.08153	-.02082	.00088	-.00018	.00003	.00074
.230	299.780	-.07222	-.02154	.00072	-.00017	.00003	.00042
.212	401.930	-.06575	-.02436	.00038	-.00018	.00002	.00049
.362	599.670	-.06992	-.02528	.00049	-.00011	.00002	.00048
.410	800.290	-.06922	-.02673	.00003	-.00025	.00002	.00049

RUN NO. 66/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.390	-1.781	-.06708	-.04914	.00030	.00044	.00004	.00223
400.550	100.420	-.07963	-.03115	.00010	-.00008	.00003	.00165
400.510	200.330	-.07973	-.02374	.00012	-.00003	.00003	.00038
400.510	300.010	-.07404	-.02473	.00026	-.00007	.00003	.00088
400.510	536.220	-.07470	-.02150	.00009	-.00017	.00003	.00075
400.440	600.290	-.06943	-.02558	-.00006	-.00015	.00004	.00077
400.680	870.220	-.06918	-.02673	.00021	-.00008	.00004	.00015

RUN NO. 67/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.620	1.108	-.08577	-.05407	.00077	.00055	.00003	.10530
800.540	100.450	-.07765	-.04084	.00079	.00014	.00004	.00495
800.640	203.720	-.07651	-.02888	.00021	.00016	.00004	.00081
800.590	300.310	-.07070	-.02354	.00015	.00000	.00004	.00035
800.570	400.330	-.07532	-.02587	-.00005	-.00010	.00003	.00092
800.640	600.090	-.07676	-.02376	-.00031	-.00020	.00003	.00025
800.570	799.850	-.06875	-.02637	-.00009	-.00012	.00004	.00053

DATE 02 AUG 75

1A13 SOURCE DATA

1A13 EXTERNAL TANK (T10) SEPARATING FROM ORB. 09

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(RTJ118) (31 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = -5.000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 ATLRON = .000  
Y = .000

RUN NO. 68/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CLB	CA
.170	10.721	-.07505	-.02980	.00005	-.00011	.00003	.09174
.156	96.595	-.07694	-.02535	-.00010	.00001	.00003	.09072
.176	202.980	-.07848	-.01975	.00038	-.00019	.00003	.08987
.161	299.810	-.06955	-.02064	-.00017	-.00027	.00003	.08924
.285	402.010	-.06334	-.02320	.00022	-.00019	.00003	.08897
.284	599.590	-.06528	-.02409	-.00004	-.00021	.00004	.09056
.377	803.430	-.06628	-.02568	-.00025	-.00026	.00003	.08968

RUN NO. 69/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CLB	CA
400.300	7.918	-.06488	-.04605	.00018	-.00020	.00005	.09199
400.500	100.450	-.07697	-.03024	.00046	-.00005	.00004	.09158
400.540	200.180	-.07762	-.02292	-.00006	-.00013	.00003	.09022
400.490	300.050	-.07169	-.02397	.00013	-.00015	.00004	.08982
400.480	396.310	-.07252	-.02074	.00051	-.00011	.00003	.08961
400.460	600.230	-.06742	-.02479	.00007	-.00018	.00003	.08958
400.630	800.060	-.06673	-.02589	.00015	-.00011	.00003	.08908

RUN NO. 70/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CLB	CA
800.530	9.999	-.08358	-.05167	.00095	.00061	.00004	.10417
800.570	100.330	-.07521	-.04007	.00091	.00017	.00004	.09495
800.570	203.820	-.07416	-.02810	.00016	.00005	.00004	.09079
800.620	300.340	-.06810	-.02878	.00005	-.00002	.00004	.09040
800.620	400.390	-.07255	-.02495	.00005	-.00010	.00003	.09074
800.690	600.030	-.07325	-.02260	-.00008	-.00026	.00003	.08917
800.780	799.870	-.06596	-.02528	.00036	-.00005	.00004	.08843

RUN NO. 71/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CLB	CA
1200.900	10.998	-.06325	-.02122	-.00055	-.00160	.00004	.09437
1200.900	100.240	-.07251	-.02650	.00045	-.00055	.00004	.10066
1200.800	196.240	-.06365	-.02494	.00026	-.00033	.00004	.09751
1200.900	299.540	-.06340	-.03198	.00009	-.00004	.00004	.09115
1200.790	399.790	-.06800	-.02902	-.00009	-.00007	.00004	.09084
1200.630	600.030	-.07463	-.02401	-.00005	-.00014	.00003	.08957
1200.630	799.710	-.06335	-.02355	-.00001	-.00023	.00003	.08756

DATE 02 AUG 75

IA13 SOURCE DATA

IA13, EXTERNAL TANK(T10) SEPARATING FROM DRB. 09

INTJ131 31 JUL 75

## REFERENCE DATA

SREF = 2680.0000 SQ. FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

HACH = 4.530 TOTAL = 110.000  
 ALFA = -5.000 BETA = .000  
 DALLA = .000 GAMA = .000  
 ELEVTR = .000 ALPHAEN = .000  
 Y = 200.000

RUN NO. 75/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.223	11.267	-.08161	-.02570	.00024	-.00429	.00003	.09155
.320	103.810	-.08128	-.02344	-.00218	-.00057	.00003	.09066
.265	199.980	-.07477	-.01969	-.00236	.00125	.00003	.08953
.261	297.050	-.06735	-.02134	-.00134	.00089	.00003	.08836
.233	399.960	-.06317	-.02368	.00041	-.00022	.00003	.08892
.164	598.620	-.06609	-.02437	.00040	-.00018	.00003	.08942
.153	800.300	-.06686	-.02583	.00054	-.00015	.00003	.08939

RUN NO. 74/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.420	9.807	-.07288	-.03528	.00244	-.00444	.00003	.09176
400.480	99.905	-.07630	-.02739	.00152	-.00239	.00003	.09144
400.520	199.860	-.07746	-.02270	.00013	-.00090	.00003	.09006
400.460	302.980	-.07429	-.02290	-.00133	-.00029	.00003	.08987
400.420	399.690	-.07207	-.02079	-.00149	.00012	.00003	.08966
400.500	599.700	-.06649	-.02433	.00071	-.00007	.00003	.08975
400.510	800.100	-.06616	-.02570	.00023	-.00007	.00003	.08901

RUN NO. 73/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.600	10.069	-.07512	-.04291	-.00071	-.00736	.00003	.09548
800.610	99.969	-.07315	-.03544	.00057	-.00311	.00003	.09257
800.780	200.040	-.07324	-.02777	.00305	-.00212	.00003	.09061
800.730	298.890	-.07057	-.02627	.00241	-.00171	.00003	.09037
800.590	399.860	-.07300	-.02346	.00015	-.00023	.00003	.09039
800.590	599.630	-.07113	-.02284	-.00047	.00053	.00003	.09034
800.650	799.950	-.06678	-.02519	.00000	.00007	.00003	.09842

RUN NO. 72/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	10.657	-.07384	-.03813	-.00243	.00062	.00003	.10362
1200.800	104.400	-.07429	-.03548	-.00242	.00069	.00004	.10131
1201.100	200.400	-.07429	-.03933	.00343	-.00240	.00004	.09449
1200.900	300.400	-.07429	-.03305	.00471	-.00276	.00005	.09159
1200.900	400.400	-.07312	-.02740	.00278	-.00163	.00003	.09132
1200.900	500.400	-.07074	-.02360	-.00048	.00021	.00003	.09457
1200.900	600.400	-.06645	-.02433	-.00000	.00000	.00004	.09457

DATE 02 AUG 75

IA13 SOURCE DATA

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(RTJ20) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = .000 DBETA = 5.000  
 ELEVR = .000 AILRON = .000  
 Y = 200.000

RUN NO. 76/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.175	7.957	-.08038	-.02698	-.07213	-.02282	.00004	.09228
.154	100.910	-.08156	-.02469	-.06937	-.02272	.00003	.09140
.224	203.190	-.08005	-.01948	-.06651	-.02181	.00003	.09054
.191	299.780	-.07257	-.02060	-.06353	-.02238	.00002	.09005
.173	401.640	-.06605	-.02330	-.06342	-.02293	.00003	.08993
.270	599.640	-.06848	-.02406	-.06303	-.02326	.00003	.09164
.256	799.930	-.06943	-.02534	-.06180	-.02291	.00004	.09017

RUN NO. 77/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.230	9.443	-.07188	-.03177	-.07326	-.02713	.00004	.09143
400.560	100.160	-.07872	-.02743	-.06957	-.02381	.00003	.09243
400.510	200.000	-.07841	-.02302	-.06638	-.02282	.00003	.09073
400.470	300.050	-.07457	-.02320	-.06614	-.02198	.00003	.09063
400.400	396.600	-.07452	-.02033	-.06495	-.02201	.00003	.09075
400.470	600.300	-.06939	-.02417	-.06278	-.02294	.00002	.09076
400.480	800.320	-.06938	-.02537	-.06171	-.02278	.00003	.09002

RUN NO. 78/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.370	10.134	-.07888	-.04296	-.07002	-.03364	.00005	.09677
800.650	100.100	-.07742	-.03634	-.07015	-.02601	.00004	.09300
800.670	203.220	-.07709	-.02755	-.06443	-.02483	.00003	.09156
800.770	300.330	-.07236	-.02825	-.06655	-.02355	.00003	.09118
800.730	400.440	-.07616	-.02455	-.06669	-.02243	.00003	.09157
800.720	600.050	-.07553	-.02252	-.06336	-.02238	.00003	.09022
800.570	799.850	-.06897	-.02484	-.06149	-.02243	.00003	.08954

RUN NO. 79/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	10.239	-.09906	-.03655	-.06050	-.02476	.00004	.10211
1200.900	99.924	-.09947	-.03154	-.05419	-.02452	.00004	.10249
1201.000	199.930	-.09637	-.03583	-.06244	-.02676	.00004	.09513
1200.400	299.570	-.09639	-.03051	-.06370	-.02523	.00003	.09217
1200.400	399.990	-.07144	-.02914	-.06487	-.02418	.00003	.09156
1200.900	499.750	-.07746	-.02350	-.06546	-.02175	.00002	.09219
1200.400	599.470	-.06840	-.02473	-.06244	-.02199	.00003	.09359

ORIGINAL PAGE IS  
 OF POOR QUALITY

## IA13, EXTERNAL TANK(T10) SEPARATING FROM ORB. 08

(RTJ121) (31 JUL 75)

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 113.000  
 ALPHA = -5.000 BETA = .000  
 DIALPHA = .000 DBETA = 5.000  
 ELESTR = .000 ALLUMIN = .000  
 Y = .000

RUN NO. 83/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.308	11.090	-.08442	-.02813	-.07306	-.02008	.00104	.0197
.178	101.730	-.08946	-.02947	-.05821	-.02111	.00004	.00000
.181	203.140	-.08327	-.01943	-.05229	-.02329	.00003	.09031
.308	297.310	-.07172	-.02124	-.05150	-.02369	.00003	.08979
.165	400.020	-.06759	-.02399	-.06350	-.02290	.00003	.08930
.348	597.750	-.06980	-.02446	-.06371	-.02321	.00003	.09141
.296	800.510	-.07154	-.02585	-.06278	-.02307	.00003	.03995

RUN NO. 82/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.370	9.149	-.07945	-.04243	-.07897	-.02161	.00003	.03380
400.420	99.832	-.05448	-.02888	-.07083	-.02085	.00003	.09205
400.320	199.890	-.05240	-.02262	-.06593	-.02189	.00003	.09056
400.400	303.610	-.07864	-.02325	-.06530	-.02190	.00003	.09061
400.470	399.790	-.07610	-.02083	-.06320	-.02194	.00002	.09032
400.480	599.690	-.06945	-.02432	-.06359	-.02302	.00003	.09057
400.480	800.030	-.06931	-.02520	-.06239	-.02390	.00003	.08976

RUN NO. 81/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.700	9.994	-.08417	-.05390	-.06925	-.02763	.00006	.10621
800.670	100.130	-.08034	-.03901	-.07089	-.02312	.00005	.09506
800.770	200.000	-.07580	-.02775	-.06779	-.02282	.00004	.09182
800.530	295.820	-.07153	-.02700	-.06876	-.02158	.00003	.09105
800.630	399.690	-.07495	-.02358	-.06680	-.02184	.00003	.09116
800.730	599.650	-.07440	-.02250	-.06295	-.02321	.00003	.09392
800.660	800.010	-.05903	-.02497	-.06233	-.02275	.00003	.08930

RUN NO. 80/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.400	9.126	-.06275	-.02247	-.05590	-.03047	.00004	.09693
1200.700	103.890	-.07216	-.01910	-.05819	-.02781	.00003	.10172
1200.800	200.520	-.05482	-.02717	-.06501	-.02592	.00004	.09761
1200.700	300.330	-.05901	-.02190	-.05966	-.02296	.00004	.09278
1200.400	400.540	-.07445	-.02425	-.05893	-.02240	.00002	.09195
1200.400	500.540	-.06162	-.02329	-.05437	-.02222	.00003	.09011
1200.500	600.540	-.05444	-.02382	-.06252	-.02189	.00003	.08947

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ22) (31 JUL 75)

1A13.EXTERNAL TANK(10)SEPARATING FROM DRB. 09

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 ELEVTB = .000 AILRON = .000  
 Y = .000

RUN NO. 84/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.029	199.410	-.16541	-.03958	.00004	-.00038	.00003	.09149
.226	299.790	-.15436	-.03947	-.00016	-.00041	.00002	.09131
.222	400.170	-.14969	-.04042	-.00011	-.00044	.00002	.09143
.189	599.670	-.14237	-.04529	-.00018	-.00033	.00002	.09246
.240	800.190	-.14436	-.04639	-.00056	-.00046	.00002	.09171
.412	999.680	-.14310	-.04627	-.00045	-.00045	.00003	.09093
1.532	1299.500	-.14549	-.04677	-.00055	-.00046	.00003	.09287

RUN NO. 85/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.520	199.060	-.16595	-.04439	.00007	-.00048	.00002	.09280
400.660	299.770	-.15390	-.04354	-.00010	-.00033	.00002	.09104
400.480	400.240	-.15065	-.04416	-.00016	-.00034	.00002	.09203
400.340	598.560	-.14803	-.04227	-.00003	-.00045	.00002	.09170
400.400	800.440	-.14343	-.04590	-.00049	-.00039	.00002	.09134
400.420	999.770	-.14166	-.04554	-.00018	-.00039	.00003	.09123
400.610	1300.400	-.14475	-.04652	-.00014	-.00054	.00002	.09265

RUN NO. 86/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.490	200.590	-.15377	-.05319	.00001	-.00023	.00002	.09214
800.630	301.090	-.14405	-.04998	-.00015	-.00033	.00002	.09210
800.660	400.290	-.14569	-.04871	-.00022	-.00036	.00003	.09255
800.750	600.480	-.15382	-.04286	-.00019	-.00048	.00002	.09181
800.760	800.220	-.14432	-.04522	-.00013	-.00034	.00002	.09025
800.690	999.500	-.14147	-.04527	-.00027	-.00035	.00003	.09148
800.910	1300.000	-.14454	-.04655	-.00016	-.00041	.00002	.09216

RUN NO. 87/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	200.090	-.15460	-.05090	.00037	-.00030	.00003	.09999
1200.800	298.120	-.12913	-.05703	-.00013	-.00034	.00003	.09291
1200.920	400.100	-.14050	-.05186	-.00056	-.00038	.00003	.09337
1200.900	599.970	-.15099	-.04681	-.00045	-.00031	.00003	.09171
1200.920	799.020	-.15043	-.04199	-.00022	-.00028	.00002	.09035
1200.970	999.900	-.14107	-.04475	-.00018	-.00035	.00003	.09142
1200.970	1300.500	-.14302	-.04615	-.00009	-.00029	.00003	.09162

DATE 02 AUG 75

1A13 SOURCE DATA

1A13 EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(R101-51) 31 JUL 75

REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.330 P/TOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 CALSLO = -10.000 C/ATA = .000  
 ELEVAT = 1000 A/RUN = .000  
 Y

RUN NO. 88/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CA
.023	300.670	-.28970	-.03628	.00019	-.00047	.09057
.012	399.860	-.23749	-.05920	-.00025	-.00033	.09130
.128	599.530	-.23362	-.06138	-.00050	-.00046	.09443
.244	800.180	-.22984	-.06504	-.00057	-.00051	.09407
.218	999.800	-.22865	-.06471	-.00067	-.00052	.09322
.170	1299.600	-.23047	-.06543	-.00053	-.00048	.09526

RUN NO. 89/ 0 RN/L = 8.58

X	Z	CN	CLM	CY	CYN	CA
400.600	299.860	-.27564	-.05316	.00002	-.00039	.09453
400.690	399.690	-.23458	-.06518	-.00035	-.00038	.09377
400.330	596.410	-.24034	-.05976	-.00054	-.00049	.09485
400.560	800.110	-.22991	-.06478	-.00051	-.00047	.09344
400.440	999.850	-.22793	-.06410	-.00027	-.00035	.09350
400.630	1300.500	-.23050	-.06566	-.00042	-.00054	.09516

RUN NO. 90/ 0 RN/L = 8.58

X	Z	CN	CLM	CY	CYN	CA
800.730	303.670	-.23670	-.07001	-.00015	-.00026	.09138
800.610	399.990	-.22142	-.07300	-.00012	-.00019	.09504
800.860	600.880	-.23909	-.06476	-.00024	-.00042	.09456
800.720	800.350	-.23953	-.05992	-.00040	-.00035	.09312
800.670	999.550	-.22717	-.05365	-.00042	-.00033	.09350
800.900	1300.000	-.23003	-.06542	-.00044	-.00042	.09443

RUN NO. 91/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CA
1200.500	235.790	-.22408	-.05777	.00003	-.00047	.09714
1201.000	401.090	-.21158	-.07849	-.00011	-.00023	.09416
1200.900	600.250	-.23436	-.06823	-.00045	-.00037	.09441
1200.900	799.430	-.24012	-.06212	-.00040	-.00041	.09267
1200.800	999.400	-.23457	-.05116	-.00013	-.00025	.09320
1201.100	1300.600	-.23190	-.06573	-.00027	-.00033	.09410

1A13 SOURCE DATA

1A13 EXTERNAL TANK (10) SEPARATING FROM ORB. 09

REFERENCE DATA

SREF = 2690.0000 50 FT. XMRP = 1403.0000 IN. XT  
REF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = 0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = -5.000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = .000 AILTRON = .000  
Y = 200.000

RUN NO. 95/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.023	299.840	-27022	-04680	-00859	.00203	-.00001	.09785
.281	399.650	-24205	-05085	-00335	.00028	.00000	.09294
.281	600.320	-23199	-05428	-00080	-.00024	.00001	.09428
.288	800.410	-23241	-06587	.00007	-.00049	.00001	.09398
.337	999.840	-23149	-06569	-.00002	-.00035	.00002	.09340
.324	1300.200	-23292	-06632	.00012	-.00023	.00002	.09553

RUN NO. 94/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.340	300.380	-27305	-05491	-00229	-.00113	.00000	.09498
400.580	403.020	-24310	-06350	.00105	-.00208	.00001	.09404
400.370	599.890	-24255	-05976	-.01197	.00041	.00001	.09421
400.580	800.320	-23165	-06545	.00014	-.00033	.00001	.09330
400.450	999.700	-22961	-06490	-.00022	-.00053	.00001	.09349
400.490	1299.800	-23196	-06625	-.00049	-.00049	.00001	.09477

RUN NO. 93/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.870	303.160	-23785	-07191	.00401	-.00226	.00001	.09354
800.550	397.330	-23116	-07115	.00473	-.00283	.00001	.09492
800.580	599.580	-24207	-06348	.00020	-.00043	.00001	.09419
800.550	799.470	-23960	-06083	-.00106	.00047	.00001	.09288
800.600	997.790	-22895	-06435	-.00009	-.00028	.00001	.09392
800.750	1300.700	-23279	-06652	-.00042	-.00052	.00001	.09425

RUN NO. 92/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	239.050	-23160	-06820	.00054	.00193	.00003	.09444
1200.800	400.230	-21919	-07828	.00714	-.00217	.00003	.09526
1201.100	601.050	-24280	-06745	.00255	-.00180	.00001	.09494
1201.600	800.990	-24368	-06207	-.00100	-.00105	.00001	.09284
1200.600	999.640	-23290	-06201	-.00045	-.00073	.00001	.09340
1200.900	1299.900	-23075	-06545	.00030	-.00049	.00002	.09424



1A13 EXTERNAL TANK (110) SEPARATING FROM ORB. 09

(RTJL.5) (31 JUL 75)

REFERENCE DATA

SREF = 269' 0000 SQ.FT. YMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MASS = 4.530 PTOTAL = 110.000  
 ALPHA = .5000 BETA = .000  
 JALPH = .10 000 DBETA = .5000  
 ELEV = .000 AILRON = .000  
 Y = .200 10

RUN NO. 96/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.076	300.720	-.29182	-.03827	-.08530	-.01785	-.00004	.09009
.073	400.210	-.24115	-.06006	-.07793	-.02067	.00000	.09353
.146	539.430	-.23636	-.06167	-.07632	-.02115	.00000	.09438
.282	800.130	-.23400	-.06324	-.07581	-.02142	.00000	.09446
.215	999.590	-.23287	-.06485	-.07431	-.02104	.00001	.09355
.149	1300.000	-.23558	-.06602	-.07593	-.02136	.00000	.09591

RUN NO. 97/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.690	299.500	-.27816	-.05323	-.08054	-.02067	-.00001	.09140
400.630	399.800	-.23742	-.06629	-.07613	-.02213	.00001	.09409
400.400	596.750	-.24473	-.05974	-.07835	-.02017	.00000	.09485
400.520	800.210	-.23427	-.05494	-.07519	-.02110	.00000	.09378
400.440	999.790	-.23178	-.05439	-.07449	-.02117	.00000	.09380
400.720	1300.500	-.23450	-.06573	-.07599	-.02151	.00001	.09511

RUN NO. 98/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.560	302.970	-.24048	-.07033	-.07318	-.02308	.00001	.09151
800.630	400.170	-.22713	-.07290	-.07329	-.02363	.00001	.09494
800.900	600.810	-.24306	-.06462	-.07759	-.02097	.00000	.09452
800.740	800.200	-.24353	-.06012	-.07627	-.02003	.00001	.09324
800.500	999.450	-.23133	-.06391	-.07477	-.02110	.00000	.09390
900.820	1300.100	-.23493	-.06599	-.07602	-.02136	.00001	.09475

RUN NO. 99/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.500	296.360	-.23333	-.06648	-.07035	-.02305	.00001	.09507
1200.900	401.220	-.21395	-.07891	-.07051	-.02435	.00002	.09471
1200.800	600.300	-.23984	-.06863	-.07499	-.02209	.00001	.09459
1200.800	799.340	-.24372	-.06195	-.07659	-.02017	.00000	.09304
1200.800	999.420	-.23763	-.06112	-.07566	-.02077	.00000	.09360
1201.100	1300.700	-.23557	-.06587	-.07573	-.02136	.00000	.09455

DATE 02 AUG 75

1A13 SOURCE DATA

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(R0J28) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -10.000 DBETA = 5.000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 103/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
.074	300.080	-.28394	-.04265	-.07226	-.02186	-.00002	.09107
.410	398.380	-.24306	-.05830	-.07596	-.02081	.00001	.09308
.415	600.420	-.23493	-.06289	-.07556	-.02170	.00000	.09411
.625	800.520	-.23458	-.06945	-.07838	-.02132	.00000	.09426
.175	999.830	-.23344	-.06500	-.07531	-.02123	.00000	.09351
.454	1300.400	-.23372	-.06819	-.07843	-.02159	.00000	.09570

RUN NO. 102/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
400.230	300.710	-.28037	-.05282	-.07821	-.01978	-.00001	.08483
400.550	403.910	-.24228	-.06160	-.07908	-.01979	.00000	.09359
400.890	600.080	-.24591	-.05841	-.07834	-.02092	.00000	.09441
400.600	800.250	-.23312	-.06465	-.07561	-.02108	.00000	.09312
400.420	999.420	-.23168	-.06421	-.07534	-.02111	.00000	.09364
400.440	1300.050	-.23512	-.06512	-.07652	-.02169	.00000	.09554

RUN NO. 101/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.780	304.750	-.23993	.07138	-.07689	-.02172	.00001	.09340
800.410	396.210	-.22825	-.0234	-.08128	-.02029	.00001	.09486
800.640	599.810	-.24373	-.06371	-.07833	-.02042	.00000	.09424
800.570	799.300	-.24253	-.05992	-.07518	-.02101	.00000	.09267
900.760	999.880	-.23154	-.08381	-.07543	-.02120	.00001	.09351
800.790	1300.700	-.23519	-.08596	-.07568	-.02141	.00001	.09488

RUN NO. 100/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	300.260	-.23041	-.06875	-.07153	-.02942	.00000	.09656
1200.700	399.850	-.21527	-.07839	-.08019	-.02254	.00002	.09448
1201.000	601.100	-.24180	-.06798	-.08094	-.02014	.00000	.09485
1201.000	800.970	-.24490	-.06139	-.07673	-.02040	.00000	.09275
1200.900	999.480	-.23578	-.06111	-.07496	-.02138	.00000	.09353
1200.900	1300.000	-.23424	-.06537	-.07580	-.02122	.00030	.09428

DATE 02 AUG 78

## 1A13 SOURCE DATA

PAGE 118

(RTJT27) ( 31 JUL 75 )

1A13.EXTERNAL TANK(110)SEPARATING FROM ORB. 08

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YHRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZHRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 104/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
-1.133	600.970	-1.48025	-.07608	-.00079	-.00022	-.00003	.09149
.422	800.750	-.46964	-.09073	-.00075	-.00075	-.00002	.10059
.252	959.950	-.45244	-.09748	-.00092	-.00058	-.00002	.10043
-1.123	1298.100	-.45244	-.09851	-.00032	-.00044	-.00001	.10251

RUN NO. 105/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
401.620	601.370	-.47636	-.09256	-.00070	-.00043	-.00002	.09844
400.240	797.470	-.47273	-.09243	-.00066	-.00044	-.00002	.10133
400.080	999.300	-.45887	-.09388	-.00070	-.00053	-.00002	.09932
400.710	1300.600	-.45519	-.09888	-.00095	-.00053	-.00002	.10210

RUN NO. 106/ 0 RN/L = 3.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.510	600.640	-.43080	-.11593	-.00121	-.00036	-.00001	.09965
801.010	801.460	-.46437	-.09899	-.00051	-.00042	-.00002	.10071
800.410	999.640	-.46924	-.08964	-.00081	-.00046	-.00002	.10032
800.440	1299.900	-.45475	-.09853	-.00072	-.00045	-.00002	.10161

RUN NO. 107/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.400	599.740	-.42082	-.11663	-.00022	-.00038	-.00000	.10124
1200.800	800.370	-.45260	-.10319	-.00073	-.00035	-.00001	.10048
1200.600	999.260	-.46356	-.09330	-.00060	-.00048	-.00002	.10096
1201.000	1300.300	-.45770	-.09685	-.00080	-.00040	-.00002	.10054

DATE 02 AUG 75 1A13 SOURCE DATA

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ281 ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DELPHA = -20.000 DBETA = .000  
 ELEVTB = .000 AILRON = .000  
 Y = 200.000

RUN NO. 111/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
-.562	359.650	-.47165	-.08533	-.00436	.00057	-.00003	.05640
1.022	801.150	-.46384	-.09357	-.00279	.00098	-.00002	.10018
.177	1000.100	-.45749	-.09770	.00008	-.00046	-.00001	.10048
.218	1300.100	-.45687	-.09922	.00021	-.00025	-.00001	.10281

RUN NO. 110/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
400.610	602.930	-.48042	-.09179	.00461	-.00415	-.00302	.10127
400.570	800.630	-.47372	-.08989	-.00206	.00015	-.00002	.10112
400.330	999.730	-.45440	-.09571	-.00066	-.00030	-.00002	.09556
400.300	1300.000	-.45405	-.09817	.00030	-.00049	-.00002	.10188

RUN NO. 109/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.600	600.400	-.44255	-.11127	.00853	-.00360	-.00001	.10105
800.520	800.260	-.47082	-.09416	.00190	-.00157	-.00002	.10073
800.150	998.900	-.46755	-.08953	-.00138	.00043	-.00002	.10026
800.870	1300.600	-.45464	-.09797	-.00092	.00065	-.00002	.10140

RUN NO. 108/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	600.110	-.42861	-.11642	.01064	-.00336	-.00000	.10155
1201.200	801.380	-.46191	-.10149	.00471	-.00272	-.00002	.10106
1200.800	999.940	-.46786	-.09227	-.00060	.00057	-.00002	.10076
1200.900	1300.200	-.45628	-.09807	-.00038	-.00041	-.00002	.10087

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DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 EXTERNAL TANK (T) DISPARATING FROM ORB. 09

(RTJUN) 1 31 JUL 75

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRIF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = 20.000 DBETA = 5.000  
 ELFVIR = .000 ALLRON = .000  
 Y = .000000

RUN NO. 112/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
-1.217	599.830	-4.7892	-0.7921	-0.09347	-0.01327	-0.00000	0.00000
.309	800.720	-4.7314	-0.0960	-0.09519	-0.01389	-0.00000	0.00000
.126	999.730	-4.5705	-0.09683	-0.09140	-0.01963	-0.00000	0.00000
.112	1300.000	-4.5730	-0.09832	-0.09159	-0.01993	-0.00000	0.00000

RUN NO. 113/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
401.690	601.560	-4.7681	-0.09402	-0.09004	-0.02167	-0.00000	0.00000
400.090	797.630	-4.7735	-0.09170	-0.09387	-0.01840	-0.00000	0.00000
400.000	999.240	-4.6085	-0.09385	-0.09397	-0.01914	-0.00000	0.00000
400.710	1300.400	-4.5618	-0.09762	-0.09168	-0.01902	-0.00000	0.00000

RUN NO. 114/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.780	600.740	-4.3616	-0.11364	-0.08559	-0.02333	-0.00000	0.00000
801.100	801.400	-4.6599	-0.09736	-0.09248	-0.01963	-0.00000	0.00000
800.400	999.700	-4.7164	-0.08891	-0.09304	-0.01929	-0.00000	0.00000
800.650	1300.100	-4.5697	-0.09764	-0.09177	-0.01999	-0.00000	0.00000

RUN NO. 115/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.500	599.840	-4.5227	-0.11544	-0.08355	-0.02371	-0.00000	0.00000
1200.700	800.150	-4.5522	-0.10174	-0.09352	-0.02091	-0.00000	0.00000
1200.700	999.300	-4.5644	-0.09222	-0.09281	-0.01894	-0.00000	0.00000
1201.000	1300.300	-4.5920	-0.09647	-0.09203	-0.01971	-0.00000	0.00000

DATE 02 AUG 75 1A13 SOURCE DATA

1A13.EXTERNAL TANK(110)SEPARATING FROM DRB. 09 (RTJ30) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 DAPHA = -20.000 DELTA = 5.000  
 ELEVTR = .000 ALLRON = .000  
 Y = .000

RUN NO. 119/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
-917	599.900	-47875	-08196	-09093	-01941	-00006	09364
1135	801.480	-47253	-09259	-09101	-02072	-00006	10003
245	1000.100	-46164	-09799	-09231	-01971	-00004	10720
220	1300.200	-46065	-09942	-09280	-02009	-00004	10221

RUN NO. 118/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
400.550	602.950	-47335	-09434	-09792	-01760	-00006	09825
400.570	800.710	-47469	-08985	-09383	-01892	-00005	10057
400.230	999.480	-45801	-09459	-09155	-01971	-00004	09909
400.420	1300.200	-45768	-09837	-09268	-02002	-00004	10204

RUN NO. 117/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.400	800.360	-43729	-11211	-09708	-01870	-00003	10021
800.760	800.410	-46832	-09538	-09597	-01821	-00005	10018
800.170	998.960	-46986	-08792	-09228	-01906	-00005	09990
800.930	1301.000	-45837	-09791	-09270	-01991	-00004	10168

RUN NO. 116/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	800.340	-42631	-11688	-09611	-02015	-00002	10156
1201.100	801.340	-46037	-10184	-09750	-01820	-00004	10059
1200.800	1000.100	-46863	-09167	-09413	-01862	-00005	10059
1200.700	1300.000	-45780	-09659	-09216	-01993	-00004	10051

RTUT31 ( 31 JUL 75

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

## REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 110.000  
 ALPHA = -5.000 BETA = .000  
 CALPHA = -30.000 DBETA = 5.000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 120/ 0 RN/L = 6.57

X Z CLM CN CY CYN CBL CA  
 -3.671 1297.400 -.12979 -.12993 -.00044 -.00044 -.00048 .00730

RUN NO. 121/ 0 RN/L = 6.57

X Z CLM CN CY CYN CBL CA  
 400.390 1300.300 -.12966 -.12966 -.00124 -.00056 -.00048 .10922

RUN NO. 122/ 0 RN/L = 6.56

X Z CLM CN CY CYN CBL CA  
 600.330 1300.000 -.12206 -.12206 -.00059 -.00051 -.00047 .10302

RUN NO. 123/ 0 RN/L = 6.56

X Z CLM CN CY CYN CBL CA  
 1200.800 1300.600 -.12250 -.12250 -.00096 -.00040 -.00007 .10898

## REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

RTUT32 ( 31 JUL 75

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 CALPHA = 5.000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 124/ 0 RN/L = 4.80

X Z CLM CN CY CYN CBL CA  
 .290 10.180 -.06975 -.02873 -.00100 -.00034 -.00005 .09106

.263 102.520 -.07606 -.02315 -.00049 -.00027 -.00004 .09026

.327 203.430 -.07372 -.02099 -.00038 -.00043 -.00004 .09024

.320 300.630 -.07114 -.02201 -.00030 -.00029 -.00004 .09041

.436 399.980 -.06883 -.02489 -.00045 -.00030 -.00005 .09040

.307 600.390 -.05763 -.02576 -.00080 -.00044 -.00004 .08960

DATE 02 AUG 75 1A13 SOURCE DATA

1A13 EXTERNAL TANK (110) SEPARATING FROM ORB. 09 (RTJ132) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .5100

PARAMETRIC DATA

MACH = 4.420 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DIALPHA = 5.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 125/ 0 RN/L = 4.80

X	Z	UN	CLM	CY	CYN	CBL	CA
400.490	9.769	-.06537	-.03464	-.00026	-.00017	.00005	.09229
400.540	100.150	-.07033	-.02711	-.00067	-.00038	.00004	.09104
400.530	203.050	-.06888	-.02643	-.00094	-.00027	.00004	.09113
400.560	297.560	-.07434	-.02337	-.00065	-.00037	.00004	.09077
400.610	398.770	-.07584	-.02194	-.00057	-.00045	.00004	.09012
400.550	600.050	-.06805	-.02540	-.00081	-.00038	.00004	.08917

RUN NO. 126/ 0 RN/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
800.660	9.930	-.05340	-.04133	-.00740	.00001	.00005	.10293
800.580	100.290	-.06561	-.03255	-.00013	-.00023	.00005	.09535
800.740	200.580	-.06118	-.03136	-.00074	-.00018	.00004	.09186
800.600	299.980	-.06955	-.02935	-.00044	-.00029	.00005	.09150
800.700	400.700	-.07454	-.02663	-.00074	-.00038	.00004	.09073
800.830	600.060	-.07308	-.02259	-.00071	-.00040	.00004	.08895

RUN NO. 127/ 0 RN/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	10.888	-.02717	.00057	-.00322	-.00178	.00003	.07940
1200.800	99.230	-.03105	-.01750	-.00124	-.00104	.00005	.09474
1200.600	201.740	-.05175	-.03454	-.00067	-.00037	.00004	.10041
1201.000	301.050	-.06612	-.03788	-.00057	-.00017	.00004	.09438
1200.900	399.900	-.06828	-.03107	-.00064	-.00024	.00005	.09109
1201.000	599.750	-.07357	-.02589	-.00061	-.00032	.00004	.08938



DATE 02 AUG 75

1A13 SOURCE DATA

1A13 EXTERNAL TANK(110) SEPARATING FROM ORB. 09

(RTJ133) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1230.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 D ALPHA = .000 D BETA = .000  
 ELEVTR = .000 ALTCON = .000  
 Y = .000

RUN NO. 128/ 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CBL	CA
248	8.036	-14649	-05157	-00088	-00054	.00003	.09382
163	102.990	-14943	-04647	-00046	-00044	.00004	.09273
286	199.960	-14676	-04140	-00030	-00042	.00003	.09295
285	302.260	-14858	-04054	-00069	-00052	.00002	.09373
373	399.360	-14716	-04128	-00032	-00052	.00004	.09319
457	600.160	-14139	-04521	-00077	-00049	.00003	.09245
467	799.730	-13895	-04451	-00097	-00058	.00003	.09255
487	1000.300	-14095	-04501	-00046	-00054	.00003	.09423

RUN NO. 129/ 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CBL	CA
400.440	9.304	-13130	-06583	-00153	-00017	.00004	.09274
400.460	100.200	-14337	-05083	-00074	-00040	.00004	.09404
400.680	200.270	-14073	-04724	-00071	-00046	.00004	.09315
400.540	300.150	-14418	-04701	-00059	-00043	.00004	.09375
400.550	398.990	-14347	-04351	-00050	-00056	.00003	.09317
400.600	599.870	-14682	-04273	-00061	-00053	.00003	.09132
400.600	800.030	-13963	-04447	-00050	-00038	.00003	.09463
400.600	1000.300	-14186	-04549	-00031	-00045	.00004	.09367

RUN NO. 130/ 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CBL	CA
800.560	9.794	-12879	-05809	-00025	-00038	.00003	.10201
800.620	100.300	-12814	-06093	-00041	-00030	.00004	.09733
800.650	202.050	-12889	-05236	-00046	-00035	.00004	.09439
800.660	299.920	-13639	-05244	-00097	-00031	.00003	.09407
800.710	400.510	-14479	-04933	-00084	-00048	.00004	.09323
800.760	500.630	-15103	-04341	-00052	-00049	.00002	.09180
800.870	799.820	-14284	-04258	-00042	-00052	.00003	.09216
800.810	1000.000	-14159	-04516	-00083	-00044	.00003	.09352

DATE 02 AUG 75

TA13 SOURCE DATA

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TA13 EXTERNAL TANK (10) SEPARATING FROM ORB. 09 (RTJ33) (31 JUL 75)

## REFERENCE DATA

SREF = 2600.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 131 / 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CL	CA
1201.000	11.115	-05425	-01405	-00053	-00074	.00003	.07618
1201.000	99.104	-10346	-02852	-00065	-00106	.00003	.09358
1200.900	199.820	-11054	-04383	-00111	-00060	.00004	.10064
1200.900	302.170	-11253	-05358	-00105	-00032	.00003	.09747
1200.900	400.210	-11367	-05330	-00071	-00030	.00003	.09387
1201.000	600.100	-11458	-04805	-00085	-00036	.00003	.09182
1201.000	799.370	-11476	-04192	-00060	-00048	.00002	.09237
1201.000	1000.300	-11442	-04420	-00060	-00041	.00003	.09297

TA13 EXTERNAL TANK (10) SEPARATING FROM ORB. 09

(RTJ34) (31 JUL 75)

## REFERENCE DATA

SREF = 2600.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = 200.000

RUN NO. 135 / 0 RN/L = 4.79

X	Z	CN	CLM	CY	CYN	CL	CA
1210	10.547	-16028	-04727	.00327	-00451	.00001	.09388
345	101.890	-15813	-04350	.00043	-00148	.00002	.09305
330	200.010	-14968	-04051	-00185	-00068	.00002	.09283
182	296.990	-14932	-03988	-00254	-00035	.00003	.09353
314	393.450	-14670	-04307	-00155	-00069	.00004	.09316
325	400.150	-14333	-04572	-00040	-00053	.00003	.09255
345	59.740	-14142	-04518	-00028	-00047	.00004	.09245
145	1000.200	-14346	-04553	-00044	-00045	.00004	.09304

## 1A13 EXTERNAL TANK (110) SEPARATING FROM ORB, 09

TREST 4) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.000 SQ.FT. XMRP = 1403.000 IN AT  
 LREF = 1290.000 INCHES YMRP = 1250 IN. YT  
 BREF = 1250.000 INCHES ZMRP = 400.000 IN. ZT  
 SCALE = 0.00

## SCAPE DATA

MAOH = 4 3 PRTAL = 80.000  
 CPA = 10.000 DATA = 000  
 SALTA = 10.000 DATA = 000  
 TLEVER = 10.000 DATA = 000  
 Y = 10.000

RUN NO. 137 0 P/L = 4.75

X	Z	CN	CLM	CY	CYN	CA
100.400	9.877	-1.14560	-0.5781	0.0525	-0.0313	0.0000
100.550	99.931	-1.14839	-0.55079	0.0000	-0.0324	0.0000
100.540	203.310	-1.14863	-0.48698	0.0000	-0.0341	0.0000
100.650	300.650	-1.15008	-0.4491	0.0000	-0.0357	0.0000
100.500	400.420	-1.15245	-0.4240	0.0000	-0.0371	0.0000
100.510	500.200	-1.14590	-0.4397	0.0000	-0.0381	0.0000
100.670	799.810	-1.14783	-0.4492	0.0000	-0.0391	0.0000
100.740	1000.100	-1.14823	-0.4555	0.0000	-0.0397	0.0000

RUN NO. 1337 0 SN/L = 4.79

X	Z	CN	CLM	CY	CYN	CA
100.610	10.242	-1.14703	-0.48469	0.0000	-0.0342	0.0000
100.590	100.200	-1.14702	-0.48513	0.0000	-0.0349	0.0000
100.790	200.230	-1.14710	-0.48516	0.0000	-0.0355	0.0000
100.110	298.940	-1.14512	-0.48286	0.0000	-0.0312	0.0000
100.110	400.130	-1.14740	-0.4741	0.0000	-0.0360	0.0000
100.700	799.470	-1.14744	-0.48241	0.0000	-0.0367	0.0000
100.470	1000.100	-1.14559	-0.47389	0.0000	-0.0349	0.0000
100.730	1000.300	-1.14774	-0.48552	0.0000	-0.0393	0.0000

RUN NO. 137 0 SN/L = 4.79

X	Z	CN	CLM	CY	CYN	CA
1200.500	14.385	-1.14461	-0.49123	0.0000	-0.0337	0.0000
1200.400	101.350	-1.14474	-0.49583	0.0000	-0.0341	0.0000
1200.900	199.100	-1.14473	-0.49534	0.0000	-0.0347	0.0000
1200.800	300.280	-1.14476	-0.49574	0.0000	-0.0352	0.0000
1201.000	400.500	-1.14479	-0.49583	0.0000	-0.0354	0.0000
1201.500	799.840	-1.14450	-0.49749	0.0000	-0.0367	0.0000
1201.100	1000.100	-1.14491	-0.49162	0.0000	-0.0349	0.0000
1201.200	1000.100	-1.14435	-0.49479	0.0000	-0.0347	0.0000



DATE 02 AUG 75

1A13 SOURCE DATA

(RTJ135) (31 JUL 75)

1A13, EXTERNAL TANK (110) SEPARATING FROM ORB. 03

REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

PAPYMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -10.000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
ELEVTR = .000 AILRON = .000  
Y = 203.000

RUN NO. 136/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
.184	9.483	-.15838	-.05058	-.07257	-.02357	.00002	.09414
.245	98.825	-.15328	-.04809	-.07009	-.02243	.00002	.08249
.317	203.730	-.15251	-.04255	-.07204	-.02157	.00002	.08258
.393	302.120	-.15407	-.04084	-.07254	-.02128	.00002	.09342
.323	400.000	-.15182	-.04203	-.07049	-.02184	.00001	.09271
.326	600.220	-.14599	-.04558	-.06850	-.02187	.00002	.09213
.415	799.860	-.14405	-.04490	-.06904	-.02196	.00003	.09217
.453	1000.100	-.14655	-.04534	-.06926	-.02201	.00003	.09329

RUN NO. 137/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.360	9.690	-.13753	-.06112	-.06728	-.02624	.00004	.09301
400.500	100.170	-.14622	-.05036	-.06926	-.02356	.00003	.09395
400.460	200.210	-.14422	-.04819	-.06920	-.02346	.00002	.09264
400.460	298.400	-.14744	-.04840	-.07051	-.02248	.00002	.09343
400.440	399.370	-.15377	-.04335	-.07150	-.02119	.00002	.09300
400.510	599.920	-.14995	-.04296	-.06834	-.02141	.00002	.09156
400.620	799.920	-.14390	-.04468	-.06972	-.02203	.00002	.09248
400.660	1000.400	-.14609	-.04550	-.07040	-.02227	.00001	.09308

RUN NO. 138/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
800.550	9.982	-.13283	-.06065	-.06028	-.02774	.00004	.09883
800.730	100.130	-.13121	-.05918	-.06531	-.02569	.00004	.09565
800.830	201.130	-.13135	-.05321	-.06408	-.02437	.00003	.09367
800.610	299.840	-.14034	-.05210	-.06587	-.02432	.00003	.09340
800.830	400.450	-.14657	-.04935	-.06968	-.02284	.00002	.09271
800.820	600.670	-.14348	-.04299	-.07029	-.02083	.00002	.09171
800.790	799.790	-.14602	-.04273	-.06988	-.02174	.00002	.09210
800.860	1000.100	-.14598	-.04536	-.06973	-.02214	.00002	.09333

DATE 02 AUG 75

IA13 SOURCE DATA

PAGE 128

IA13,EXTERNAL TANK(110)SEPARATING FROM ORB, 09

(RTJUS) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACI = 1.0000 PTDIAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DIALPHA = 0.000 DBETA = 5.000  
 ELEVTR = 0.000 AIRLON = 300  
 Y = 200.000

RUN NO. 139/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	10.995	-1.11939	-0.3413	-0.0332	-0.06833	.00005	.05462
1201.100	97.096	-1.12601	-0.4113	-0.0545	-0.01870	.00002	.10291
1201.000	198.150	-1.11510	-0.5516	-0.05904	-0.02404	.00003	.10074
1200.800	301.270	-1.12775	-0.5784	-0.06393	-0.02430	.00003	.09590
1200.900	400.220	-1.13936	-0.5274	-0.06596	-0.02438	.00003	.09336
1201.000	500.000	-1.14847	-0.4728	-0.06933	-0.02216	.00003	.09186
1201.100	799.490	-1.15073	-0.4136	-0.07112	-0.02108	.00003	.08263
1201.200	1000.300	-1.14638	-0.4399	-0.06377	-0.02207	.00002	.09260

IA13,EXTERNAL TANK(110)SEPARATING FROM ORB, 09

(RTJUS) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACI = 1.520 PTDIAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DIALPHA = 0.000 DBETA = 5.000  
 ELEVTR = 0.000 AIRLON = 300  
 Y = 200.000

RUN NO. 143/ 1 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
.237	11.180	-1.15898	-0.4873	-0.07881	-0.01808	.00005	.09380
.181	103.410	-1.15816	-0.4578	-0.07453	-0.02026	.00004	.08295
.263	187.240	-1.15280	-0.3984	-0.07282	-0.02132	.00002	.08243
.356	300.190	-1.15382	-0.3990	-0.07055	-0.02204	.00002	.09290
.341	387.860	-1.14950	-0.4241	-0.06930	-0.02285	.00001	.09238
.274	600.020	-1.14565	-0.4525	-0.06973	-0.02203	.00002	.09182
.444	789.860	-1.14361	-0.4454	-0.06597	-0.02219	.00002	.09218
.471	1000.300	-1.14612	-0.4530	-0.06060	-0.02256	.00002	.09386



REFERENCE DATA

SREF = 2690.0000 SQ FT. XREF = 1403.0000 IN. YF  
LREF = 1290.3000 INCHES YREF = .0000 IN. YF  
BREF = 1290.3000 INCHES ZREF = 400.0000 IN. ZF  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -10.000 BETA = .000  
CALPHA = .000 DBETA = 5.000  
ELEVTR = .000 AIRLON = .000  
Y = .000

RUN NO. 142/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.460	9.873	-14357	-106393	-108474	-102121	.00005	.09378
400.450	100.000	-14991	-105059	-107869	-102083	.00003	.09382
400.480	200.120	-14698	-104693	-107634	-102083	.00003	.09307
400.510	301.270	-15103	-104538	-107447	-102075	.00003	.09333
400.550	400.470	-15485	-104226	-107266	-102112	.00002	.09258
400.610	600.220	-14813	-104309	-106990	-102229	.00002	.09123
400.660	799.730	-14254	-104407	-106970	-102207	.00003	.09217
400.580	1000.200	-14475	-104500	-107060	-102244	.00002	.09328

RUN NO. 141/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
800.530	9.302	-112661	-115175	-107235	-102625	.00004	.10453
800.540	99.849	-113334	-105932	-107436	-102389	.00003	.09825
800.700	200.150	-113044	-105403	-107833	-102265	.00002	.09407
800.380	298.320	-114791	-105098	-107790	-102082	.00002	.09361
800.560	400.230	-115023	-104832	-107472	-102125	.00002	.09274
800.790	599.310	-115338	-104199	-107106	-102119	.00002	.09146
800.790	799.740	-114450	-104288	-106927	-102220	.00002	.09169
800.730	1000.500	-114503	-104482	-107090	-102230	.00002	.09323

RUN NO. 140/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	10.778	-109243	-101175	-105657	-102494	.00003	.07779
1200.800	100.840	-110499	-102894	-105838	-102494	.00002	.09422
1200.200	199.710	-112037	-105103	-106946	-102515	.00003	.10117
1200.900	299.170	-112733	-105301	-107453	-102470	.00002	.09422
1201.090	400.710	-11362	-105351	-107735	-102379	.00002	.09304
1200.800	600.310	-11315	-104791	-107236	-102142	.00003	.09170
1200.500	799.730	-113456	-104118	-107137	-102137	.00002	.09170
1200.300	1000.500	-113402	-104423	-107049	-102137	.00002	.09170

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1A13, EXTERNAL TANK (TID) SEPARATING FROM ORB. 09

(01-0157) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1200.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.000 F/GAL = 80.000  
 ALPHA = -10.000 DELTA = .000  
 CALPHA = 3.000 DBETA = .000  
 ELEVAT = .000 ALTCON = .000  
 Y = .000

RUN NO. 144/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CEL	CA
.201	199.860	-.24447	-.05904	-.00110	-.00074	.00002	.00003
.264	300.070	-.23122	-.06308	-.00115	-.00060	.00301	.00002
.331	401.280	-.23911	-.06085	-.00135	-.00065	.00001	.00001
.381	600.190	-.22968	-.05395	-.00148	-.00076	.00002	.00002
.342	799.810	-.22680	-.06400	-.00138	-.00078	.00002	.00002
.378	999.470	-.22820	-.06490	-.00093	-.00076	.00002	.00002
.1613	1300.600	-.23469	-.05669	-.00137	-.00075	.00002	.00002

RUN NO. 145/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CEL	CA
400.450	196.750	-.23307	-.06619	-.00144	-.00058	.00001	.00001
400.540	300.220	-.22017	-.07085	-.00170	-.00051	.00002	.00002
400.550	397.330	-.22924	-.06749	-.00114	-.00054	.00002	.00002
400.560	599.800	-.23081	-.06028	-.00107	-.00068	.00002	.00002
400.430	799.840	-.22742	-.06358	-.00116	-.00056	.00001	.00001
400.710	1000.500	-.22948	-.06501	-.00084	-.00055	.00002	.00002
400.690	1300.500	-.23329	-.06626	-.00113	-.00066	.00002	.00002

RUN NO. 146/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CEL	CA
800.550	200.370	-.20078	-.07824	-.00165	-.00068	.00003	.00003
800.620	299.950	-.20140	-.07799	-.00140	-.00055	.00003	.00003
800.800	400.300	-.21828	-.07437	-.00181	-.00059	.00003	.00003
800.690	600.820	-.23507	-.06571	-.00100	-.00058	.00002	.00002
800.780	799.910	-.23760	-.05950	-.00134	-.00066	.00002	.00002
800.810	999.950	-.22921	-.06475	-.00113	-.00060	.00002	.00002
800.800	1300.000	-.23243	-.06594	-.00132	-.00075	.00002	.00002

RUN NO. 147/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CEL	CA
1201.000	200.400	-.18871	-.05999	-.00182	-.00077	.00003	.00003
1201.100	301.330	-.18524	-.08043	-.00154	-.00061	.00003	.00003
1200.800	401.150	-.20072	-.08032	-.00137	-.00031	.00003	.00003
1200.900	600.360	-.22695	-.07049	-.00143	-.00045	.00003	.00003
1200.900	799.860	-.23487	-.05311	-.00117	-.00059	.00002	.00002
1200.900	1000.100	-.23880	-.06120	-.00117	-.00061	.00003	.00003
1201.000	1300.330	-.23094	-.06507	-.00099	-.00057	.00002	.00002

DATE 12 AUG 75 1A13 SOURCE DATA

(RTJT38) ( 31 JUL 75 )

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 08

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 (REF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVT = .000 AIRRON = .000  
 Y = .000

RUN NO. 148/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.123	300.630	-.38256	-.05701	-.00099	-.00057	-.00001	.09512
.115	400.080	-.32909	-.08329	-.00115	-.00046	.00001	.09922
.357	600.140	-.34428	-.07589	-.00123	-.00074	.00001	.09812
.330	799.910	-.32877	-.08074	-.00111	-.00081	.00001	.09772
.422	999.650	-.33039	-.08206	-.00121	-.00073	.00001	.09983
.212	1299.900	-.33603	-.08346	-.00070	-.00065	.00001	.09908

RUN NO. 148/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
400.560	299.800	-.34095	-.07851	-.00145	-.00051	.00000	.09858
400.600	400.020	-.31143	-.09329	-.00127	-.00044	.00002	.09913
400.370	598.660	-.33740	-.08071	-.00077	-.00060	.00001	.09830
400.540	799.540	-.33960	-.07533	-.00091	-.00064	.00000	.09780
400.690	1000.500	-.33116	-.08193	-.00071	-.00059	.00001	.09927
400.710	1300.600	-.33513	-.08351	-.00065	-.00068	.00001	.09952

RUN NO. 150/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
800.420	302.160	-.28131	-.09834	-.00155	-.00066	.00002	.09704
800.610	399.710	-.28633	-.10159	-.00158	-.00050	.00003	.09903
800.780	600.760	-.32509	-.08801	-.00140	-.00051	.00001	.09765
800.810	800.240	-.33871	-.07838	-.00121	-.00063	.00001	.09836
800.760	999.820	-.33908	-.07726	-.00115	-.00065	.00000	.09881
800.730	1299.800	-.33278	-.08228	-.00108	-.00071	.00001	.09868

RUN NO. 151/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	300.540	-.27124	-.08560	-.00173	-.00094	.00002	.09831
1200.600	400.270	-.25927	-.10437	-.00163	-.00056	.00003	.09859
1201.000	601.590	-.30728	-.09191	-.00162	-.00051	.00000	.09809
1200.930	800.090	-.32762	-.08479	-.00158	-.00051	.00001	.09780
1200.700	1000.100	-.31939	-.07850	-.00166	-.00059	.00000	.09809
1201.000	1300.100	-.33119	-.08410	-.00096	-.00064	.00001	.09763

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1A13, EXTERNAL TANK (T10) SEPARATING FROM ORB. 09

(RTJ103) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETER DATA

MACH = 4.520 PITCH = 80.000  
 ALPHA = -10.000 BETA = .000  
 DIALPHA = -10.000 DELTA = .000  
 ELEVTR = .000 ALTITUDE = 6.0  
 Y = 200.000

RUN NO. 155/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CEL	CA
.215	300.350	-.37141	-.06398	-.00279	-.00123	-.00001	0.0010
.444	400.130	-.34600	-.07707	-.00090	-.00179	-.00000	0.0005
.403	600.300	-.34439	-.07692	-.00374	.00060	.00001	.09754
.338	799.970	-.33229	-.08188	-.00023	-.00081	.00001	.09763
.350	1000.200	-.33279	-.08270	-.00022	-.00064	.00001	.09329
.507	1300.500	-.33819	-.08407	-.00034	-.00037	.00002	.09897

RUN NO. 154/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CEL	CA
400.370	300.600	-.35212	-.08051	.00954	-.00475	.00001	.09950
400.550	400.890	-.33772	-.08631	.00959	-.00553	.00000	.09889
400.650	600.820	-.34715	-.07873	-.00059	-.00119	.00000	.09829
400.630	799.900	-.34020	-.07673	-.00059	-.00035	.00000	.09736
400.550	999.800	-.33159	-.08221	-.00059	-.00075	.00001	.09865
400.180	1300.400	-.33574	-.08350	-.00128	-.00071	.00001	.09886

RUN NO. 153/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CEL	CA
600.850	303.240	-.29898	-.09984	.01671	-.00384	.00002	.09850
800.590	399.710	-.30471	-.10017	.01444	-.00452	.00002	.09933
800.850	599.890	-.33655	-.08297	.00574	-.00318	.00002	.09780
800.660	799.600	-.34143	-.07563	-.00046	-.00079	.00000	.09826
800.920	1000.200	-.34807	-.07814	-.00208	-.00003	.00000	.09869
800.850	1300.400	-.33325	-.08228	-.00127	-.00089	.00001	.09834

RUN NO. 152/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CEL	CA
1200.600	298.810	-.28947	-.09020	.01554	.00147	.00003	.10241
1200.700	399.460	-.29096	-.10447	.02110	-.00433	.00003	.09930
1201.000	600.810	-.31903	-.09439	.00918	-.00345	.00001	.09847
1200.900	800.390	-.33818	-.08109	.00236	-.00231	.00001	.09800
1200.900	1000.200	-.34282	-.07767	-.00095	-.00059	.00000	.09922
1201.200	1300.300	-.33312	-.08190	-.00071	-.00072	.00001	.08795



DATE 02 AUG 75

1A13 SOURCE DATA

1A13 EXTERNAL TANK(110)SEPARATING FROM ORB. 08

(REFUTED) ( 31 JUL 75 )

## REFERENCE DATA

REF = 2890.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
REF = 1290.3000 INCHES YMRP = .0000 IN. YT  
REF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -10.000 BETA = .000  
CALPHA = -10.000 DBETA = 5.000  
FLXTR = .000 AIRRM = .000  
Y = 200.000

RUN NO. 156/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.034	300.480	-.35554	-.05678	-.02576	-.01972	-.00003	.09438
.177	400.170	-.33644	-.08200	-.08229	-.02171	-.00001	.09874
.295	600.080	-.34781	-.07555	-.08493	-.01937	-.00002	.09735
.303	800.730	-.33402	-.08079	-.08178	-.02037	.00000	.09718
.380	999.500	-.33421	-.08170	-.08311	-.02083	-.00001	.09880
.297	1300.000	-.34020	-.08319	-.08341	-.02035	-.00001	.09837

RUN NO. 157/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
400.570	299.880	-.34828	-.07882	-.07635	-.02320	-.00001	.09844
400.640	400.060	-.31875	-.09218	-.07555	-.02408	.00000	.09898
400.480	599.110	-.34375	-.08084	-.08319	-.02013	-.00001	.09764
400.480	799.560	-.34479	-.07549	-.08433	-.01970	-.00001	.09708
400.660	1000.400	-.33589	-.08190	-.08395	-.02100	.00000	.09838
400.600	1300.600	-.33985	-.08329	-.08344	-.02055	-.00001	.09829

RUN NO. 158/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
800.420	301.390	-.29812	-.09375	-.06608	-.02460	.00001	.09588
800.480	399.800	-.29420	-.10208	-.07018	-.02434	.00002	.09837
800.840	800.570	-.33253	-.08768	-.07887	-.02201	.00000	.09728
800.820	800.280	-.34374	-.07823	-.08415	-.01997	-.00001	.09780
800.780	999.990	-.34402	-.07734	-.08428	-.02003	-.00001	.09805
800.810	1300.800	-.33735	-.08810	-.09337	-.02057	.00000	.09783

RUN NO. 159/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
1201.000	300.450	-.28632	-.08175	-.06089	-.02375	.00002	.09839
1200.400	400.330	-.28713	-.08508	-.06332	-.02408	.00003	.09743
1201.200	601.310	-.34453	-.07430	-.07874	-.02130	.00000	.09711
1200.900	800.480	-.34320	-.08310	-.08415	-.01997	-.00001	.09780
1201.000	1000.200	-.34370	-.08403	-.08533	-.02003	-.00002	.09840
1201.000	1300.300	-.33501	-.08810	-.09355	-.02057	-.00001	.09720

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 EXTERNAL TANK(TIO)SEPARATING FROM ORR. 09

TANK (TIO) (TIO) 75

## REFERENCE DATA

SREF = 2690 0000 SQ.FT. XMRP = 1403.0000 IN. AT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## TANK TIO DATA

TANK = 1 2 3 4 5 6 7 8 9 10  
 ALPHA = 1 2 3 4 5 6 7 8 9 10  
 DELTA = 1 2 3 4 5 6 7 8 9 10  
 ELEVAT = 1 2 3 4 5 6 7 8 9 10  
 Y = 1 2 3 4 5 6 7 8 9 10

RUN NO. 183/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CEL	CA
128	300.360	-1.38291	-1.06064	-1.06317	-1.01991	-1.00133	.091000
375	399.970	-1.34550	-1.07920	-1.06890	-1.01853	-1.00133	.092100
489	600.330	-1.34927	-1.07604	-1.09351	-1.02085	-1.00133	.093046
298	900.070	-1.33945	-1.08100	-1.08401	-1.02080	-1.00133	.094733
412	1000.300	-1.33689	-1.08247	-1.08491	-1.02106	-1.00133	.09647
500	1300.500	-1.34194	-1.08356	-1.08474	-1.02073	-1.00133	.09815

RUN NO. 182/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CEL	CA
400.290	300.690	-1.35058	-1.07980	-1.09130	-1.01966	-1.00133	.09879
400.640	401.640	-1.33010	-1.08975	-1.09463	-1.01746	-1.00133	.09846
400.640	600.910	-1.34803	-1.07964	-1.08726	-1.01918	-1.00133	.09733
400.430	799.900	-1.34470	-1.07568	-1.08333	-1.02053	-1.00133	.09647
400.540	999.740	-1.33519	-1.08168	-1.08430	-1.02090	-1.00133	.09815
400.790	1300.500	-1.33877	-1.08319	-1.08455	-1.02033	-1.00133	.09829

RUN NO. 181/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CEL	CA
800.420	300.340	-1.28472	-1.09882	-1.08727	-1.02300	-1.00001	.09716
800.590	398.420	-1.29262	-1.10109	-1.09025	-1.02060	-1.00001	.09816
800.780	600.680	-1.33468	-1.08486	-1.08944	-1.01852	-1.00001	.09718
800.620	799.700	-1.34430	-1.07674	-1.08577	-1.01352	-1.00001	.09733
800.870	1000.100	-1.34158	-1.07697	-1.08390	-1.02079	-1.00001	.09763
800.530	1300.500	-1.33670	-1.08188	-1.08419	-1.02069	-1.00001	.09777

RUN NO. 180/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CEL	CA
1200.800	300.550	-1.27558	-1.08585	-1.08083	-1.02489	-1.00001	.10316
1200.600	399.940	-1.26690	-1.10455	-1.08802	-1.02256	-1.00001	.09801
1201.000	600.550	-1.31609	-1.09485	-1.08968	-1.02036	-1.00000	.09782
1200.800	800.270	-1.33758	-1.08193	-1.08811	-1.01939	-1.00000	.09705
1201.000	1000.400	-1.34580	-1.07745	-1.08805	-1.01991	-1.00001	.09825
1201.000	1300.200	-1.33581	-1.08121	-1.08419	-1.02049	-1.00001	.09724

DATE 02 AUG 75

1A13 SOURCE DATA

1A13, EXTERNAL TANK(110) SEPARATING FROM ORB. 09

(RTJN2) (31 JUL 75)

REFERENCE DATA

SREF = 2090.0000 00.00 1403.0000 IN. XT  
 LREF = 1.90 3000 INC #5 0000 IN. YT  
 BREF = 1000.0000 1403 400.0000 IN. ZT  
 SCALE = 0.00

RUN NO. 154/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
164	802.350	-1.60302	-1.10000	-0.0236	-0.00009	-0.00002	10498
164	999.520	-1.58735	-1.11368	-0.0241	-0.00081	-0.00004	10603
-1572	1299.000	-1.59065	-1.11633	-0.0196	-0.00071	-0.00003	10607

RUN NO. 165/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.680	798.490	-1.58864	-1.11501	-0.0218	-0.00065	-0.00003	10572
400.180	999.820	-1.60234	-1.10522	-0.0178	-0.00073	-0.00004	10605
400.720	1300.800	-1.59063	-1.11559	-0.0220	-0.00064	-0.00003	10638

RUN NO. 166/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
800.610	800.400	-1.56784	-1.12556	-0.0249	-0.00048	-0.00002	10571
800.700	1000.700	-1.59692	-1.11233	-0.0231	-0.00065	-0.00004	10655
800.640	1299.900	-1.59492	-1.11059	-0.0170	-0.00077	-0.00004	10489

RUN NO. 167/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.500	800.070	-1.57782	-1.13818	-0.0210	-0.00070	-0.00001	10580
1200.800	1000.600	-1.59075	-1.11961	-0.0239	-0.00049	-0.00003	10637
1200.800	1299.900	-1.60188	-1.10789	-0.0171	-0.00061	-0.00004	10511

PARAMETRIC DATA

MACH = 4.500 PTOTAL = 80.000  
 ALPHA = 10.000 BETA = 0.000  
 SALPHA = 20.000 DBETA = 0.000  
 ELEVTR = 0.000 ALTIRON = 0.000  
 Y = 0.000

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DATE 02 AUG 75

IA13 SOURCE DATA

IA13 EXTERNAL TANK(T10)SEPARATING FROM CR9. 03

(1970-73) 131 JUL 75

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. Y  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z  
 SCALE = .0100

GEOMETRIC DATA

MACH = 0.0000 PTOTAL = 00.0000  
 ALPHA = -10.0000 BETA = .0000  
 ALPHA = -20.0000 BETA = .0000  
 CLEVIR = 0.0000 ABLON = .0000  
 Y = 200.0000

RUN NO. 171/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.054	801.570	-.60708	-.10353	-.00438	.00005	-.00000	.00000
.314	998.590	-.59035	-.11327	-.00129	-.00090	-.00000	.00000
.528	1300.600	-.59236	-.11631	-.00146	-.00355	-.00000	.00000

RUN NO. 170/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
406.490	800.780	-.60321	-.10973	.00206	-.00271	-.00000	.00000
400.270	998.700	-.60434	-.10499	-.00383	.00008	-.00000	.00000
400.680	1300.400	-.58991	-.11499	-.00177	-.00084	-.00000	.00000

RUN NO. 169/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
800.440	800.190	-.58598	-.11802	.01027	-.00536	-.00003	.00000
800.510	999.990	-.60220	-.10519	.00080	-.00157	-.00000	.00000
800.560	1300.100	-.59333	-.11211	-.00260	-.00051	-.00003	.00000

RUN NO. 168/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	800.520	-.55095	-.11556	.01227	-.00448	-.00001	.00000
1201.000	1000.700	-.59398	-.11515	.00475	-.00366	-.00003	.00000
1201.000	1300.300	-.60554	-.10730	-.00258	-.00062	-.00004	.00000

DATE 02 AUG '75

IA13 SOURCE DATA

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IA13 EXTERNAL TANK(T10) SEPARATING FROM Q66. 09

(RTJTH4) (31 JUL 75)

## REFERENCE DATA

SREF = 2090.0000 SQ.FT. XGRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YGRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZGRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 0.420 P/TOTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 GAMMA = -20.000 DELTA = 5.000  
 ELEVTR = 0.000 ALTIRON = .000  
 Y = 200.000

RUN NO. 172/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
.094	803.080	-1.00560	-1.10457	-1.10350	-0.01835	-0.00006	.10475
-.024	888.380	-1.00900	-1.10268	-1.10098	-0.01988	-0.00005	.10811
.128	1300.300	-1.09398	-1.11610	-1.10125	-0.01993	-0.00006	.10654

RUN NO. 173/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.710	798.000	-1.59458	-1.11468	-1.10010	-0.02044	-0.00008	.10577
400.250	999.910	-1.80528	-1.10523	-1.10323	-0.01878	-0.00007	.10552
400.760	1300.800	-1.59414	-1.11550	-1.10253	-0.02011	-0.00006	.10629

RUN NO. 174/ 0 RN/L = 4.91

X	Z	CN	CLM	CY	CYN	CBL	CA
800.610	800.530	-1.57425	-1.12455	-1.09449	-0.02280	-0.00004	.10608
800.730	1000.500	-1.59951	-1.11181	-1.10242	-0.01994	-0.00006	.10649
800.420	1299.700	-1.59709	-1.11065	-1.10243	-0.01955	-0.00006	.10437

RUN NO. 175/ 0 RN/L = 4.81

X	Z	CN	CLP	CY	CYN	CBL	CA
1200.400	800.060	-1.54234	-1.11825	-1.09023	-0.02324	-0.00003	.10598
1200.900	1000.700	-1.58659	-1.11875	-1.09828	-0.02173	-0.00005	.10649
1200.800	1300.000	-1.60513	-1.10763	-1.10334	-0.01888	-0.00007	.10508

1A13 EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

INTUINS ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 90.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PRGTAL = 80.000  
 ALPHA = -10.000 BETA = .000  
 CALPHA = -20.000 DELTA = 3.000  
 ELEVAT = 0.000  
 Y = 0.000

RUN NO. 179/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CEL	CA
.110	902.280	-.60803	-.10315	-.10139	-.01931	-.00007	.10563
.356	997.890	-.59062	-.11238	-.10255	-.01986	-.00005	.10548
.573	1300.800	-.59452	-.11616	-.10286	-.02009	-.00003	.10571

RUN NO. 178/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CEL	CA
400.660	800.750	-.59753	-.11172	-.10762	-.01729	-.00004	.10605
400.190	999.610	-.60427	-.10421	-.10240	-.01946	-.00006	.10624
400.610	1300.400	-.59288	-.11317	-.10294	-.02012	-.00007	.10493

RUN NO. 177/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CEL	CA
800.230	900.280	-.57844	-.12053	-.11024	-.01668	-.00004	.10605
800.620	1000.100	-.56809	-.10955	-.10326	-.01825	-.00006	.10624
800.790	1300.300	-.59581	-.11102	-.10223	-.02020	-.00007	.10493

RUN NO. 176/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CEL	CA
1200.600	800.080	-.54297	-.13656	-.10669	-.02005	-.00003	.10594
1200.900	1000.700	-.59086	-.11747	-.10838	-.01778	-.00005	.10644
1200.900	1300.300	-.60792	-.10750	-.10361	-.01908	-.00007	.10520



1A13 SOURCE DATA

DATE 08 AUG 75

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB, 09

(RTJTN8) ( 31 JUL 75 )

REFERENCE DATA

SRF = 2990.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -10.000 BETA = .000  
DALPHA = -30.000 DBETA = .000  
ELEVR = .000 AILRON = .000  
Y = .000

RUN NO. 180/ 0 RM/L = 4.81

X Z CN CLM CY CVM CA  
-1.987 1298.900 -.98200 -.14868 -.00274 -.00080 -.00007 .11190

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB, 09

(RTJTN7) ( 31 JUL 75 )

REFERENCE DATA

SRF = 2930.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -21.000 BETA = .000  
DALPHA = 6.000 DBETA = .000  
ELEVR = .000 AILRON = .000  
Y = .000

RUN NO. 181/ 0 RM/L = 4.82

X Z CN CLM CY CVM CA  
.405 14.642 -.21362 -.07069 -.00133 -.00035 -.00002 .09605  
.376 102.570 -.21865 -.08730 -.00119 -.00039 .00003 .09563  
.327 200.950 -.22569 -.08428 -.00095 -.00052 .00002 .09494  
.410 300.630 -.23005 -.06034 -.00117 -.00059 .00002 .09440  
.424 399.910 -.22754 -.05631 -.00096 -.00067 .00003 .09449  
.597 499.640 -.21951 -.06313 -.00094 -.00070 .00002 .09540  
.543 799.920 -.22313 -.06450 -.00094 -.00066 .00002 .09612  
.383 999.290 -.22549 -.06486 -.00078 -.00057 .00002 .09536

RUN NO. 182/ 0 RM/L = 4.82

X Z CN CLM CY CVM CA  
400.680 12.229 -.18590 -.07585 -.00181 -.00055 .00003 .09647  
400.560 100.000 -.19183 -.07406 -.00187 -.00054 .00002 .09548  
400.480 199.350 -.20514 -.07184 -.00159 -.00042 .00002 .09501  
400.480 299.650 -.21751 -.06748 -.00112 -.00040 .00003 .09471  
400.860 400.280 -.22352 -.06370 -.00099 -.00036 .00001 .09413  
400.770 599.780 -.22771 -.05900 -.00076 -.00023 .00001 .09541  
400.770 900.500 -.22275 -.06357 -.00094 -.00052 .00002 .09493  
400.680 1200.400 -.22332 -.06410 -.00095 -.00064 .00002 .09552

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DATE 08 JUL 75

IA13 SOURCE DATA

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IA13 EXTERNAL TANK (110) SEPARATING FROM ORB. 08

(RTJUN7) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XREF = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YREF = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZREF = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.500 PTOAL = 80.000  
 ALPHA = -21.000 BETA = .000  
 DIALPHA = 5.000 DBETA = .000  
 ELEVTR = .000 ALTERR = .000  
 Y = .000

RUN NO. 183/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
800.710	10.512	-.11873	-.05483	-.00248	-.00149	.00004	.09750
801.040	102.470	-.14777	-.07181	-.00201	-.00120	.00003	.10106
800.840	200.420	-.17442	-.07772	-.00217	-.00069	.00003	.09830
800.900	299.800	-.19335	-.07564	-.00223	-.00043	.00003	.09459
800.760	400.470	-.20825	-.07289	-.00168	-.00047	.00002	.09388
800.820	600.310	-.22317	-.06417	-.00097	-.00042	.00002	.09518
800.800	800.430	-.22984	-.06128	-.00089	-.00053	.00002	.09565
800.950	1000.000	-.22697	-.06099	-.00071	-.00057	.00001	.09424

RUN NO. 184/ 5 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	11.411	-.06880	.00390	-.00468	-.00190	.00002	.05565
1200.900	100.140	-.09678	-.01710	-.00373	-.00178	.00002	.07464
1200.900	200.070	-.11450	-.04881	-.00325	-.00092	.00002	.09009
1201.000	299.810	-.14594	-.07171	-.00192	-.00094	.00004	.10022
1200.800	403.240	-.18090	-.07832	-.00174	-.00067	.00003	.10001
1201.000	601.110	-.20911	-.07144	-.00160	-.00051	.00002	.09426
1201.100	800.500	-.22451	-.06572	-.00102	-.00050	.00002	.09567
1201.100	1000.200	-.22928	-.06267	-.00084	-.00048	.00003	.09475

DATE 02 AUG 75

IA1: SOURCE DATA

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(RTJ48) (31 JUL 75)

IA13: EXTERNAL TANK(T10) SEPARATING FROM ORG. 29

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1250.3000 INCHES YPRP = .9000 IN. YT  
 BRPF = 1030.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 186/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
.278	7.750	-.29647	-.09652	-.00194	-.00039	.00002	.09341
.343	95.484	-.29873	-.09100	-.00214	-.00046	.00002	.09878
.288	199.810	-.30808	-.08810	-.00179	-.00039	.00001	.09844
.367	287.590	-.32013	-.08273	-.00184	-.00055	.00001	.09777
.288	399.660	-.32693	-.07727	-.00143	-.00066	.00001	.09749
.448	599.880	-.32814	-.07662	-.00107	-.00080	.00000	.09809
.603	800.690	-.32258	-.08228	-.00068	-.00067	.00000	.09926
.565	1000.400	-.32555	-.08221	-.00077	-.00070	.00000	.09857

## PARAMETRIC DATA

MACH = 4.520 P.TOTAL = 90.000  
 ALPHA = -21.000 BETA = .000  
 DIALPHA = 1.000 DBETA = .000  
 ELEVT = .000 AILRON = .000  
 Y = .000

RUN NO. 187/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.440	11.158	-.25060	-.10701	-.00209	-.00085	.00002	.09791
400.490	100.150	-.25639	-.09772	-.00233	-.00088	.00002	.09828
400.520	201.890	-.26919	-.09824	-.00304	-.00039	.00002	.09884
400.520	300.080	-.29072	-.09430	-.00222	-.00041	.00002	.09803
400.530	400.330	-.30963	-.08768	-.00168	-.00050	.00001	.09794
400.600	600.410	-.32621	-.07944	-.00138	-.00053	.00001	.09839
400.650	800.070	-.33025	-.07647	-.00112	-.00074	.00001	.09857
400.720	1000.400	-.32242	-.08149	-.00088	-.00064	.00001	.09852

RUN NO. 188/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
800.590	9.078	-.17546	-.05982	-.00452	-.00174	.00002	.09233
800.590	100.200	-.19414	-.08857	-.00333	-.00104	.00003	.10254
800.630	196.370	-.21288	-.10136	-.00272	-.00099	.00003	.10084
800.690	299.250	-.24598	-.10160	-.00261	-.00055	.00002	.09877
800.730	401.280	-.27544	-.09718	-.00218	-.00042	.00002	.09787
800.730	600.780	-.30944	-.08664	-.00124	-.00036	.00001	.09810
800.730	800.370	-.32585	-.08065	-.00110	-.00052	.00001	.09887
801.020	1000.200	-.33166	-.07690	-.00101	-.00062	.00000	.09806

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DATE 02 AUG 75

IA13 SOURCE DATA

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IA13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ48) (31 JUL 75)

## REFERENCE DATA

SREF = 2590.0000 SQ.FT. XREF = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YREF = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZREF = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -21.000 DELTA = .000  
 DIALPHA = 1.000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 185/ 0 RN/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	10.931	-.10822	.00021	-.00474	-.00148	.00002	.04962
1200.700	100.280	-.12386	-.02473	-.00679	-.00142	.00003	.07261
1200.800	200.940	-.16780	-.05190	-.00526	-.00121	.00001	.09166
1200.900	300.480	-.19294	-.08448	-.00392	-.00050	.00002	.09992
1200.800	397.810	-.22439	-.10209	-.00257	-.00072	.00002	.10289
1201.000	599.800	-.28263	-.09570	-.00209	-.00058	.00001	.09338
1200.900	800.310	-.31182	-.08948	-.00148	-.00047	.00001	.09869
1200.900	1000.000	-.32832	-.08165	-.00106	-.00045	.00000	.09814

IA13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ49) (31 JUL 75)

## REFERENCE DATA

SREF = 2090.0000 SQ.FT. XREF = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YREF = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZREF = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -21.000 DELTA = .000  
 DIALPHA = -4.000 DBETA = .000  
 ELEVR = .000 AILRON = .000  
 Y = .000

RUN NO. 130/ 0 RN/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
.205	206.990	-.39759	-.11173	-.00318	-.00022	.00001	.10202
.414	303.540	-.41057	-.10940	-.00293	-.00025	.00000	.10200
.328	400.790	-.42998	-.10050	-.00213	-.00053	-.00001	.10155
.442	599.890	-.44858	-.09012	-.00195	-.00080	-.00002	.10239
.483	799.930	-.44142	-.09573	-.00168	-.00087	-.00001	.10199
-.217	997.410	-.44191	-.09742	-.00092	-.00065	-.00002	.10217

RUN NO. 130/ 0 RN/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
400.570	199.120	-.33844	-.12075	-.00268	-.00104	.00001	.10277
400.600	299.540	-.35316	-.12367	-.00365	.00001	.00001	.10245
400.770	399.350	-.38773	-.11681	-.00267	-.00023	.00001	.10172
400.550	600.650	-.43277	-.09927	-.00131	-.00043	-.00001	.10234
400.810	800.610	-.44831	-.09317	-.00139	-.00066	-.00001	.10264
400.580	1000.200	-.44838	-.08212	-.00122	-.00073	-.00001	.10242

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IA13 SOURCE DATA

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IA13.EXTERNAL TANK(IT10)SEPARATING FROM ORB. 09

(RTJ149) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -21.000 BETA = .000  
 DALPHA = -4.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 191/ 0 RV/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
800.340	202.880	-.26382	-.11773	-.00468	-.00093	.00003	.10292
800.500	299.030	-.28612	-.12833	-.00363	-.00093	.00003	.10108
800.540	398.330	-.32871	-.12704	-.00289	-.00038	.00002	.10090
800.640	598.760	-.39781	-.11288	-.00252	-.00047	-.00001	.10207
800.770	800.270	-.43456	-.10260	-.00134	-.00049	-.00001	.10284
800.950	1000.500	-.44768	-.09452	-.00118	-.00059	-.00001	.10170

RUN NO. 192/ 0 RV/L = 4.80

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	400.840	-.27647	-.11595	-.00538	-.00002	.00003	.10372
1200.800	598.810	-.34511	-.12367	-.00234	-.00071	.00002	.10125
1201.000	799.880	-.40571	-.11068	-.00221	-.00067	.00000	.10278
1200.200	998.550	-.43397	-.10168	-.00124	-.00045	.00000	.10189

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -21.000 BETA = .000  
 DALPHA = -9.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

RUN NO. 193/ 0 RV/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
.174	400.810	-.52697	-.13182	-.00393	.00017	-.00001	.10644
.299	600.210	-.57305	-.11181	-.00231	-.00051	-.00003	.10638
.300	799.790	-.59532	-.10541	-.00210	-.00083	-.00003	.10620
-.774	997.810	-.57317	-.11317	-.00154	-.00071	-.00003	.10577

RUN NO. 194/ 0 RV/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
400.460	600.320	-.53402	-.12925	-.00299	-.00032	-.00001	.10663
400.670	800.410	-.57573	-.11325	-.00187	-.00049	-.00002	.10682
399.350	998.050	-.58653	-.10684	-.00188	-.00035	-.00003	.10602

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1A13 SOURCE DATA

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1A13, EXTERNAL TANK(T10) SEPARATING FROM ORB. 09

(RTJTS1) (31 JUL 75)

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1200.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1200.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 195/ 0 RV/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
800.230	599.260	-148300	-114140	-100639	.00054	.00000	.10679
800.850	801.550	-154113	-112417	-100207	-100034	-100001	.10678
800.740	1000.500	-157332	-111329	-100203	-100041	-100002	.10584

RUN NO. 196/ 0 RV/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.600	799.320	-149210	-114049	-100224	-100071	.00000	.10675
1199.600	998.360	-154962	-112468	-100218	-100035	-100002	.10595

1A13, EXTERNAL TANK(T10) SEPARATING FROM ORB. 09

(RTJTS1) (31 JUL 75)

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1200.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1200.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 197/ 0 RV/L = 4.81

X	Z	CN	CLM	CY	CYN	CBL	CA
-2.012	997.730	-187684	-113820	-100214	-100081	-100005	.11174

## PARAMETRIC DATA

MACH = 4.520 PTOTL = 80.000  
 ALPHA = -21.000 BETA = .000  
 DALPHA = -9.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000

## PARAMETRIC DATA

MACH = 4.520 PTOTL = 80.000  
 ALPHA = -21.000 BETA = .000  
 DALPHA = -19.000 DBETA = .000  
 ELEVTR = .000 AILRON = .000  
 Y = .000



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1A13 SOURCE DATA

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(RTJTS2) ( 31 JUL 75 )

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 08

REFERENCE DATA

SREF = 28.0 0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

RUN NO. 198/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.102	16.450	-.01320	.00258	.00878	.00078	.00005	.08991
.032	96.844	-.01275	.00278	.00855	-.00081	.00004	.08944
.153	200.250	-.00746	.00373	.00418	-.00153	.00004	.08841
.083	303.040	.00173	.00011	.00038	.00009	.00004	.08740
.243	404.360	.00154	.00098	.00065	-.00005	.00004	.08791
.112	600.140	.00121	.00057	.00004	-.00018	.00004	.08793
.135	799.980	.00185	.00126	-.00027	-.00022	.00004	.08711
.225	1000.100	.00111	.00171	.00010	-.00012	.00004	.08840

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

REFERENCE DATA

SREF = 2680.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJTS3) ( 31 JUL 75 )

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = .000

RUN NO. 199/ 0 RN/L = 8.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.136	20.976	-.01300	.00018	.00075	-.00033	.00004	.09044
.182	99.172	-.01048	.00026	.00094	-.00017	.00004	.08985
.028	199.600	-.01440	.00428	.00085	-.00033	.00004	.08919
.107	301.540	.00012	.00058	.00018	-.00031	.00004	.08763
.191	397.950	.00111	.00074	.00053	-.00013	.00004	.08761
.212	599.970	.00105	.00059	.00038	-.00004	.00004	.08778
.225	799.730	.00189	.00150	.00043	-.00007	.00004	.08728
.200	999.930	.00123	.00171	.00051	-.00014	.00004	.08860

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = .000

REFERENCE DATA

1A13.EXTERNAL TANK(T110)SEPARATING FROM CRB. 09

SREF = 2690.0000 SQ.FT.

LREF = 1290.3000 INCHES

BREF = 30.3000 INCHES

SCALE = .0100

XPRP = 1403.0000 IN. XT

YPRP = .0000 IN. YT

ZPRP = 400.0000 IN. ZT

MACH = 4.530

ALPHA = .000

BETA = .000

DELTA = .000

ELEVTR = .000

Y = 200.000

PIOTAL = 110.000

BETA = .000

DELTA = .000

AILRON = 10.000

RUN NO. 200/ 0    RN/L = 8.58

X	Z	CN	CLM	CY	CYN	COL	CA
.020	18.818	-.01305	.00199	-.00695	-.00101	.00003	.08343
.091	95.913	-.01234	.00205	-.00696	.00318	.00003	.08911
.201	199.910	-.00880	.00416	-.00335	.00135	.00004	.08830
.127	303.120	.00165	.00018	.00067	-.00018	.00004	.08738
.227	404.730	.00132	.00094	.00083	-.00003	.00004	.08783
.195	599.960	.00069	.00056	.00075	-.00007	.00004	.08783
.257	799.890	.00152	.00143	.00133	-.00002	.00004	.08711
.190	1000.000	.00080	.00152	.00063	-.00030	.00004	.08843

REFERENCE DATA

1A13.EXTERNAL TANK(T110)SEPARATING FROM CRB. 09

SREF = 2690.0000 SQ.FT.

LREF = 1290.3000 INCHES

BREF = 30.3000 INCHES

SCALE = .0100

XPRP = 1403.0000 IN. XT

YPRP = .0000 IN. YT

ZPRP = 400.0000 IN. ZT

MACH = 4.530

ALPHA = .000

BETA = .000

DELTA = .000

ELEVTR = .000

Y = -200.000

PIOTAL = 110.000

BETA = .000

DELTA = .000

AILRON = 10.000

RUN NO. 201/ 0    RN/L = 8.57

X	Z	CN	CLM	CY	CYN	COL	CA
.051	18.651	-.01843	.00138	.07240	.02218	.00003	.09168
.106	96.255	-.01439	.00117	.05777	.02207	.00004	.09104
.120	200.170	-.01332	.00478	.06188	.02242	.00004	.09019
.086	303.040	.00088	.00008	.05908	.02338	.00005	.08893
.014	400.160	.00151	.00081	.05900	.0327	.00004	.08562
.180	603.000	.00108	.00043	.05842	.02322	.00004	.08939
.187	799.920	.00160	.00129	.05822	.02303	.00005	.08864
-.019	1000.000	.00152	.00188	.05789	.02340	.00005	.08989

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IA13 SOURCE DATA

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IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ156) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = 3.000  
 ELEVTR = .000 AILRON = 10.000  
 Y = .000

RUN NO. 202/ 0 RN/L = 8.58

X	Z	CN	CLM	CY	CYN	CSL	CA
.108	19.661	-.01293	.00137	-.05983	-.02178	.00004	.09125
.042	100.330	-.01196	.00167	-.05878	-.02278	.00002	.09093
.114	198.310	-.01231	.00477	-.05421	-.02491	.00003	.09030
.153	301.500	.00143	.00032	-.05830	-.02380	.00003	.08921
.135	400.290	.00195	.00098	-.05806	-.02352	.00003	.08965
.210	600.070	.00180	.00093	-.05781	-.02354	.00003	.08948
.115	799.890	.00252	.00164	-.05794	-.02325	.00004	.08989
.058	999.980	.00208	.00199	-.05761	-.02359	.00003	.09022

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 03

(RTJ157) ( 31 JUL 75 )

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = 5.000  
 ELEVTR = .000 AILRON = 10.000  
 Y = 200.000

RUN NO. 203/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CSL	CA
.268	23.474	-.01514	.00128	-.06985	-.02255	.00004	.09141
-.004	101.120	-.01325	.00132	-.06577	-.02247	.00004	.09100
.044	204.550	-.01273	.00523	-.06029	-.02288	.00003	.09008
.029	300.120	.00087	.00080	-.05788	-.02364	.00003	.08976
.072	397.320	.00178	.00098	-.05815	-.02352	.00004	.08947
.234	600.000	.00101	.00058	-.05754	-.02349	.00003	.08934
.137	799.730	.00151	.00152	-.05775	-.02341	.00003	.08977
.253	1000.000	.00115	.00152	-.05747	-.02405	.00004	.09013

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IA13 SOURCE DATA

IA13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ59) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

RUN NO. 204/ 0 RV/L = 6.58

X	Z	CN	CLM	CY	CYN	CSL	CA
.158	300.700	-.17277	-.02848	.01333	-.00386	.00002	.09007
.202	400.410	-.14137	-.03780	.00478	-.00221	.00002	.09149
.206	602.300	-.13142	-.04291	.00013	-.00021	.00002	.09307
.255	800.330	-.13000	-.04207	-.00014	-.00031	.00002	.09225
.128	999.240	-.12818	-.04142	.00000	-.00022	.00003	.09315
-.118	1298.600	-.13225	-.04352	-.00001	-.00004	.00002	.09262

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
GALPHA = -10.000 DBETA = .000  
ELEVIR = .000 AILRON = 10.000  
Y = -200.000

IA13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ59) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

RUN NO. 205/ 0 RV/L = 6.58

X	Z	CN	CLM	CY	CYN	CSL	CA
.151	301.070	-.20493	-.01988	.00028	-.00053	.00000	.08934
.022	398.180	-.15578	-.03384	-.00001	-.00049	.00002	.09208
.145	598.280	-.13292	-.04340	.00058	-.00024	.00002	.09267
.093	797.490	-.13172	-.04256	.00024	-.00024	.00003	.09229
.169	999.750	-.13032	-.04199	.00017	-.00017	.00003	.09350
.400	1300.800	-.13460	-.04458	-.00012	-.00004	.00002	.09289

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
GALPHA = -10.000 DBETA = .000  
ELEVIR = .000 AILRON = 10.000  
Y = .000

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IA13 SOURCE DATA  
(RTJ61) ( 31 JUL 75 )

IA13, EXTERNAL TANK (TIO) SEPARATING FROM ORB. 09

REFERENCE DATA

SREF = 2690.0000 50. FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

RUN NO. 206/ 0 RN/L = 6.57

X	Z	CM	CLM	CY	CYN	CA
.174	303.180	-.17855	-.02818	-.01208	.00315	.08982
.192	400.430	-.14408	-.03772	-.00483	.00170	.00002
.248	802.160	-.13290	-.04333	.00162	-.00015	.09287
.173	900.170	-.13502	-.04270	.00072	-.00018	.09220
.035	999.320	-.13043	-.04217	.00008	-.00027	.09346
.168	1299.800	-.13442	-.04427	.00056	-.00035	.09255

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = 200.000

REFERENCE DATA

SREF = 2690.0000 50. FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

RUN NO. 207/ 0 RN/L = 6.57

X	Z	CM	CLM	CY	CYN	CA
.248	301.710	-.20639	-.02006	.08220	.01730	.08890
.185	400.570	-.15512	-.03531	.07199	.02008	.09122
.202	802.480	-.13639	-.04311	.06819	.02148	.09232
.232	800.230	-.13532	-.04225	.06742	.02128	.09161
.078	999.410	-.13438	-.04194	.06825	.02155	.09278
-.188	1298.700	-.13781	-.04401	.06738	.02155	.09221

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = -5.000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

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IA13 SOURCE DATA

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IA13, EXTERNAL TANK (110) SEPARATING FROM ORB. 09

RTJUT63 ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 50.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 CALPHA = 10.000 DELTA = 5.000  
 ELEVTR = .000 AIRLON = 10.000  
 Y = .000

RUN NO. 208/ C RN/L = 8.57

X	Z	CN	CLM	CY	CYN	CEL
.172	300.730	-.19833	-.02900	-.05108	-.02303	.00100
.128	400.570	-.15417	-.03543	-.06505	-.02367	.00100
.075	602.650	-.13681	-.04324	-.06860	-.02187	.00100
.142	800.360	-.13598	-.04242	-.06729	-.02165	.00100
-.031	999.230	-.13413	-.04189	-.06833	-.02184	.00100
-.264	1298.700	-.13915	-.04427	-.06809	-.02193	.00100

IA13, EXTERNAL TANK (110) SEPARATING FROM ORB. 09

RTJUT63 ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 50.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 CALPHA = 10.000 DELTA = 5.000  
 ELEVTR = .000 AIRLON = 10.000  
 Y = .000

RUN NO. 209/ C RN/L = 8.58

X	Z	CN	CLM	CY	CYN	CEL	CA
.161	300.730	-.21214	-.01814	-.08172	-.01798	-.00001	.08052
.080	398.990	-.15750	-.03510	-.07176	-.02050	.00001	.09104
.182	599.310	-.13727	-.04332	-.06833	-.02174	.00001	.09268
.123	797.350	-.13630	-.04247	-.06759	-.02174	.00002	.09201
.238	999.810	-.13469	-.04214	-.06882	-.02203	.00001	.09349
.362	1300.700	-.13893	-.04440	-.06772	-.02204	.00002	.09242

REFERENCE DATA

SREF = 2690.0000 SQ. FT. XREF = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YREF = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZREF = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 2107 0 C/L = 6.57

X	Z	CN	CLM	CY	C/N	C/L	CA
.173	803.040	-.34107	-.07208	.00708	-.00330	-.00001	.09462
.270	800.570	-.32044	-.08045	-.00068	-.00038	.00000	.09763
.039	999.640	-.31913	-.07895	-.00025	-.00031	.00000	.09854
-1.268	1298.000	-.32028	-.08116	-.00020	-.00019	.00001	.09844

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = -200.000

REFERENCE DATA

SREF = 2690.0000 SQ. FT. XREF = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YREF = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZREF = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 2117 0 C/L = 6.58

X	Z	CN	CLM	CY	C/N	C/L	CA
.040	803.150	-.37832	-.05433	-.00045	-.00043	-.00001	.08808
-.037	798.170	-.32080	-.08050	-.00004	-.00030	.00001	.09765
.070	999.880	-.32002	-.07928	-.00024	-.00038	.00000	.09887
.381	1300.500	-.32224	-.08187	-.00069	-.00055	.00000	.09853

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = .000

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IA13 SOURCE DATA

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IA13, EXTERNAL TANK (T10) SEPARATING FROM ORB. 08

(RTJ165) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BRFL = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 D ALPHA = -20.000 C ALPHA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = 200.000

RUN NO. 212/ 0 RV/L = 8.57

X	Z	CN	CLM	CY	CYN	CA
.167	603.240	-.34162	-.07116	-.00764	.00254	.09457
.280	800.340	-.32037	-.08038	.00001	-.00034	.09763
-.128	999.540	-.31949	-.07912	.00012	-.00038	.09871
.131	1300.000	-.32172	-.09137	.00021	-.00047	.09826

IA13, EXTERNAL TANK (T10) SEPARATING FROM ORB. 09

(RTJ167) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BRFL = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 D ALPHA = -20.000 D BETA = -5.000  
 ELEVTR = .000 AILRON = 10.000  
 Y = -200.000

RUN NO. 213/ 0 RV/L = 8.57

X	Z	CN	CLM	CY	CYN	CA
.142	602.020	-.37463	-.05762	.08710	.01754	.08897
.194	800.630	-.32373	-.07959	.08115	.01962	.09728
-.057	999.700	-.32252	-.07807	.08173	.01973	.09843
-1.435	1297.900	-.32348	-.08034	.08117	.01975	.09824

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IA13 SOURCE DATA

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IA13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJT68) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 214/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CEL	CA
.014	605.010	-.35813	-.06421	-.07682	-.02304	-.00004	.09188
.094	800.870	-.32313	-.07953	-.08138	-.02028	-.00001	.09735
-.103	999.630	-.32241	-.07828	-.08194	-.02033	-.00001	.09852
-1.468	1297.900	-.32381	-.08058	-.08196	-.02049	-.00001	.09826

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = 5.000  
 ELEVTR = .000 AILRON = 10.000  
 Y = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 215/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CEL	CA
.050	602.350	-.37439	-.05650	-.08882	-.01818	-.00005	.08881
-.006	798.100	-.32340	-.07958	-.08152	-.02014	-.00002	.09741
.130	999.980	-.32293	-.07833	-.08148	-.02034	-.00001	.09851
.344	1300.500	-.32455	-.08053	-.08202	-.02039	-.00001	.09797

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = 5.000  
 ELEVTR = .000 AILRON = 10.000  
 Y = 200.000

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IA13 SOURCE DATA

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IA13, EXTERNAL TANK(T10) SEPARATING FROM ORB. 08

(RTJ770) (31 JUL 78)

## REFERENCE DATA

SREF = 2400.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1200.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1200.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = -200.000

RUN NO. 218/ 0 RV/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.256	17.995	-.07791	-.02299	.00194	.00283	.00004	.09138
.282	100.260	-.07677	-.02085	.00440	.00032	.00004	.09079
.233	202.020	-.07012	-.01882	.00343	-.00155	.00004	.08932
.237	302.730	-.06307	-.02068	.00125	-.00108	.00004	.08874
.210	400.800	-.05848	-.02169	-.00078	-.00034	.00004	.08853
.332	599.740	-.06038	-.02197	-.00048	-.00019	.00004	.09012
.335	799.800	-.06111	-.02380	-.00038	-.00024	.00004	.08931

## REFERENCE DATA

SREF = 2400.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1200.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1200.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = .000

IA13, EXTERNAL TANK(T10) SEPARATING FROM ORB. 08

(RTJ771) (31 JUL 78)

RUN NO. 217/ 0 RV/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.191	20.768	-.07282	-.02650	-.00011	-.00037	.00004	.09154
.237	101.290	-.07359	-.02490	-.00019	-.00021	.00004	.09072
.193	201.830	-.07500	-.01935	-.00005	-.00033	.00004	.08969
.278	297.830	-.06817	-.01941	.00006	-.00034	.00004	.08884
.229	395.660	-.05873	-.02146	-.00020	-.00033	.00004	.08831
.291	598.530	-.06035	-.02200	-.00035	-.00030	.00004	.09004
.277	800.180	-.06034	-.02352	-.00038	-.00043	.00005	.08935



(RTJT72) ( 31 JUL 75 )

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = 200.000

RUN NO. 218/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.171	17.524	-.07666	-.02358	-.00087	-.00328	.00004	.09114
.293	100.020	-.07653	-.02171	-.00348	-.00118	.00003	.09060
.298	202.190	-.07117	-.01878	-.00306	.00098	.00003	.08951
.293	302.970	-.06346	-.02044	-.00126	.00053	.00004	.08866
.219	400.860	-.05850	-.02155	.00047	-.00020	.00004	.08859
.297	599.720	-.06077	-.02215	.00060	-.00026	.00004	.09034
.379	799.970	-.06086	-.02373	.00009	-.00031	.00004	.08934

(RTJT73) ( 31 JUL 75 )

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = .000 DBETA = -5.000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

RUN NO. 219/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.238	18.572	-.08046	-.02525	.07143	.02236	.00004	.09220
.305	100.800	-.07907	-.02371	.06927	.02158	.00004	.09122
.331	202.400	-.07874	-.01899	.06480	.02082	.00004	.08966
.286	303.300	-.06901	-.02011	.06180	.02134	.00004	.08895
.220	401.120	-.08191	-.02197	.06116	.02172	.00004	.08854
.409	599.870	-.06303	-.02227	.06099	.02220	.00005	.09037
.320	799.680	-.06461	-.02386	.05965	.02195	.00004	.08952



IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ75) ( 31 JUL 75 )

## REFERENCE DATA

SNJF = 2690.0000 SQ.FT. XREFP = 1433.0000 IN. XT  
 LREF = 1290.3000 INCHES YREFP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZREFP = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 220/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CSL	CA
.252	18.148	-.07819	-.02501	-.06829	-.01888	.00003	.09136
.220	97.993	-.07897	-.02330	-.06579	-.02038	.00003	.09098
.263	206.100	-.07716	-.01784	-.06004	-.02286	.00002	.09014
.312	304.120	-.06686	-.02022	-.06011	-.02310	.00003	.08927
.360	401.370	-.06175	-.02180	-.06174	-.02342	.00003	.08912
.263	599.780	-.06327	-.02212	-.06151	-.02353	.00003	.09083
.236	799.740	-.06395	-.02357	-.06009	-.02374	.00004	.08991

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DIALPHA = .000 DBETA = 5.000  
 ELEVTR = .000 AILROM = 10.000  
 Y = .000

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ75) ( 31 JUL 75 )

## REFERENCE DATA

SNJF = 2690.0000 SQ.FT. XREFP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YREFP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZREFP = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 221/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CSL	CA
.254	22.712	-.07946	-.02517	-.07114	-.02288	.00004	.09199
.192	101.860	-.07854	-.02398	-.06839	-.02210	.00004	.09125
.206	199.490	-.07703	-.01891	-.06471	-.02123	.00003	.09013
.215	297.780	-.06932	-.01972	-.06175	-.02200	.00003	.08934
.184	398.350	-.06184	-.02184	-.06174	-.02248	.00003	.08899
.301	598.870	-.06391	-.02246	-.06112	-.02274	.00004	.09100
.298	800.130	-.06453	-.02401	-.06047	-.02288	.00004	.08986

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DIALPHA = .000 DBETA = 5.000  
 ELEVTR = .000 AILROM = 10.000  
 Y = 200.000

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IA13 SOURCE DATA

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IA13,EXTERNAL TANK(110)SEPARATING FROM ORB. 08

(RTJ776) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

RUN NO. 222/ 0 RN/L = 4.83

K	Z	CN	CLM	CY	CYN	CBL	CA
.273	300.760	-.26163	-.04814	.00817	-.00247	.00001	.09190
.357	400.420	-.23368	-.05681	.00308	-.00156	.00002	.09374
.161	598.650	-.21811	-.06185	-.00024	-.00043	.00002	.09455
.327	800.110	-.22034	-.06329	-.00037	-.00036	.00002	.09478
.422	999.870	-.21913	-.06304	-.00113	-.00055	.00002	.09412
.069	1299.000	-.22035	-.06350	-.00013	-.00045	.00002	.09516

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

RUN NO. 223/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.253	301.160	-.29001	-.03843	.00015	-.00050	.00000	.09127
.215	399.210	-.23345	-.05654	.00021	-.00037	.00002	.09365
.157	600.030	-.22289	-.06048	.00014	-.00043	.00002	.09453
.291	700.310	-.22042	-.06333	-.00032	-.00048	.00002	.09485
.261	999.70	-.21848	-.06304	-.00046	-.00051	.00002	.09412
.433	1500.400	-.22175	-.06422	-.00017	-.00053	.00002	.09544

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = .000

IA13,EXTERNAL TANK(110)SEPARATING FROM ORB. 08

(RTJ777) ( 31 JUL 75 )

IA13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ778) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = -200.000

RUN NO. 224/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.210	300.810	-.28389	-.04790	-.00878	.00184	.00000	.09102
.255	400.400	-.23404	-.05710	-.00355	.00036	.00001	.09372
.179	599.670	-.21953	-.06208	-.00015	-.00041	.00002	.09406
.328	800.090	-.22071	-.06340	-.00004	-.00056	.00003	.09478
.293	999.810	-.21978	-.06332	.00043	-.00046	.00002	.09409
.390	1299.900	-.22136	-.06385	.00012	-.00039	.00002	.09622

IA13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ778) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -10.000 DBETA = -5.000  
 ELEVTR = .000 AILRON = 10.000  
 Y = -200.000

RUN NO. 225/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.255	301.600	-.28473	-.04098	.08439	.01732	.00002	.09099
.348	400.610	-.23659	-.05833	.07851	.01939	.00003	.09348
.197	599.610	-.22416	-.06026	.07444	.02023	.00003	.09419
.337	800.150	-.22324	-.06291	.07323	.02029	.00003	.09421
.200	999.630	-.22198	-.06285	.07160	.02005	.00003	.09358
-.062	1299.200	-.22477	-.06388	.07359	.02042	.00003	.09574

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1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJTB0) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2660.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 226/ 0 RM/L = 4.83

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -10.000 DBETA = 5.000  
 ELEVTR = .000 AILRC = 10.000  
 Y = .000

X	Z	CN	CLM	CY	CYN	CBL	CA
.300	301.420	-.26222	-.04237	-.07188	-.02168	-.00001	.09184
.139	400.660	-.23650	-.05615	-.07418	-.02050	.00000	.09327
.230	599.700	-.22174	-.06075	-.07416	-.02141	.00001	.09424
.308	800.170	-.22233	-.06268	-.07455	-.02120	.00001	.09441
.209	999.990	-.22045	-.06221	-.07397	-.02119	.00000	.09368
.078	1299.300	-.22424	-.06375	-.07528	-.02173	.00001	.09612

REFERENCE DATA

SREF = 2660.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 227/ 0 RM/L = 4.83

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DALPHA = -10.000 DBETA = 5.000  
 ELEVTR = .000 AILRC = 10.000  
 Y = .000

X	Z	CN	CLM	CY	CYN	CBL	CA
.140	300.300	-.26848	-.03918	-.08414	-.01781	-.00001	.09086
.085	398.910	-.23487	-.04795	-.07863	-.02028	.00000	.09358
.241	599.870	-.22374	-.06000	-.07447	-.02108	.00000	.09445
.231	800.150	-.22278	-.06276	-.07358	-.02108	.00001	.09418
.329	999.990	-.22112	-.06239	-.07277	-.02100	.00001	.09347
.388	1300.300	-.22358	-.06331	-.07464	-.02145	.00001	.09570

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1A13 SOURCE DATA

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1A13, EXTERNAL TANK(10)SEPARATING FROM ORB. 09

(RTJ182) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2090.0000 SQ.FT. XREF = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YREF = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZREF = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DELPHA = -20.000 DBETA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = -200.000

RUN NO. 229/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.178	801.980	-.46182	-.08418	.00395	-.00174	-.00182	.03745
.187	799.720	-.44193	-.09199	.00120	-.00157	-.00001	.10052
.247	999.980	-.43643	-.09485	-.00141	-.00060	-.00001	.10084
-1.010	1298.800	-.43655	-.08814	-.00100	-.00042	-.00001	.10296

1A13, EXTERNAL TANK(10)SEPARATING FROM ORB. 09

(RTJ183) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2090.0000 SQ.FT. XREF = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YREF = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZREF = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DELPHA = -20.000 DBETA = .000  
 ELEVTR = .000 AILRON = 10.000  
 Y = .000

RUN NO. 229/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.165	602.090	-.48672	-.07186	-.00069	-.00035	-.00002	.09099
.116	799.430	-.45126	-.06915	-.00017	-.00057	-.00001	.10090
.277	1000.300	-.43783	-.09513	-.00050	-.00057	-.00001	.10082
.258	1300.200	-.43780	-.09888	-.00018	-.00034	-.00001	.10295



1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 08

REFERENCE DATA

SREF = 2890.0000 50.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

RUN NO. 230/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.218	602.130	-.46412	-.08413	-.00464	.00055	-.00002	.09715
.124	800.130	-.44436	-.08211	-.00291	.00051	-.00002	.10055
.110	999.820	-.43790	-.05911	-.00002	-.00055	-.00001	.10076
.136	1300.000	-.43830	-.09647	.00028	-.00045	-.00001	.10295

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = .000 AILRON = 10.000  
Y = 200.000

1A13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 08

(RTJTB5) (31 JUL 75)

REFERENCE DATA

SREF = 2890.0000 50.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

RUN NO. 231/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CBL	CA
-.007	603.330	-.46430	-.07539	.08277	.01768	.00003	.09240
.253	799.870	-.45200	-.08871	.09150	.01781	.00002	.10098
.164	999.940	-.43950	-.05424	.08782	.01837	.00002	.10088
-1.054	1298.300	-.43972	-.09588	.08867	.01892	.00003	.10307

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
ALPHA = -5.000 BETA = .000  
DALPHA = -20.000 DBETA = -5.000  
ELEVTR = .000 AILRON = 10.000  
Y = -200.000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ186) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DAPHA = -20.000 DBETA = 3.000  
 ELEVTR = .000 AILRON = 10.000  
 Y = .000

RUN NO. 232/ 0 RN/L = 4.82

X	Z	CN	CLM	CY	CYN	CEL	CA
.205	803.940	-.47902	-.07743	-.09016	-.01869	-.00005	.09337
.146	799.900	-.44875	-.08970	-.08921	-.02055	-.00004	.10076
.076	799.900	-.43870	-.09419	-.09053	-.01964	-.00003	.10073
-.943	1298.400	-.43931	-.09578	-.09085	-.01994	-.00003	.10294

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJ187) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 80.000  
 ALPHA = -5.000 BETA = .000  
 DAPHA = -20.000 DBETA = 5.000  
 ELEVTR = .000 AILRON = 10.000  
 Y = .000

RUN NO. 233/ 0 RN/L = 4.83

X	Z	CN	CLM	CY	CYN	CEL	CA
.227	802.080	-.49133	-.07210	-.09417	-.01867	-.00006	.08125
.060	799.350	-.45366	-.08888	-.04178	-.01886	-.00004	.10090
.243	1000.300	-.44143	-.09455	-.08909	-.01942	-.00003	.10076
.199	1300.100	-.44070	-.09594	-.08971	-.01986	-.00003	.10292



REFERENCE DATA

SREF = 2630.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = 10.000 AIRLON = .000  
Y = .000

RUN NO. 234/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CRL	CA
.123	2.613	-.01566	-.00189	.00054	-.00024	.00003	.09009
.175	100.730	-.01336	-.00033	.00008	-.00030	.00003	.08942
.038	198.070	-.01411	.00467	.00010	-.00039	.00003	.08860
.187	301.750	-.00068	.00037	.00010	-.00024	.00003	.08743
.199	399.900	-.00022	.00013	.00033	-.00022	.00003	.08743
.211	593.960	-.00221	-.00092	-.00008	-.00020	.00003	.08767
.153	799.850	-.00167	-.00012	.00010	-.00009	.00003	.08726
.203	1000.300	-.00242	.00006	-.00028	-.00016	.00003	.08848

RUN NO. 235/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.390	-1.458	-.00923	-.01663	.00033	.00037	.00003	.08922
400.390	100.110	-.01736	-.00311	.00004	-.00034	.00003	.08996
400.410	200.190	-.02160	.00639	.00037	-.00048	.00002	.08865
400.330	300.090	-.00716	.00274	.00032	-.00030	.00003	.08774
400.390	399.990	-.00299	.00010	-.00014	-.00025	.00003	.08796
400.430	598.890	-.00199	-.00081	-.00020	-.00021	.00003	.08746
400.460	799.830	-.00231	-.00001	-.00039	-.00015	.00003	.08740
400.540	1000.100	-.00330	-.00063	-.00001	-.00008	.00003	.08826

RUN NO. 236/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.600	1.472	-.04009	-.03995	.00253	.00054	.00004	.10203
800.570	100.030	-.02795	-.01002	.00102	.00008	.00003	.08921
800.570	200.130	-.02593	.00377	.00022	-.00001	.00003	.08875
800.570	300.740	-.00971	.00021	.00008	-.00017	.00003	.08856
800.490	400.030	-.00802	.00117	-.00012	-.00018	.00003	.08849
800.630	599.940	-.00171	-.00066	-.00027	-.00015	.00003	.08729
800.540	799.800	-.00299	-.00003	-.00003	-.00009	.00003	.08791
800.680	999.960	-.00368	-.00120	-.00025	-.00020	.00003	.08734



1A13, EXTERNAL TANK(T10) SEPARATING FROM ORG. 08

(RTJ108) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2660.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = 10.000 ALLFON = .000  
Y = .000

RUN NO. 237/ 0 RN/L = 6.56

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	-1.176	-1.04489	-.03513	.00122	-.00027	.00004	.10963
1200.800	99.679	-.03712	-.01690	.00075	.00011	.00003	.09845
1200.800	200.110	-.01638	-.00482	.00034	.00011	.00003	.08949
1200.700	299.400	-.01040	-.00221	.00011	.00005	.00003	.08946
1200.700	399.520	-.00898	-.00029	.00066	.00003	.00003	.08662
1200.700	599.260	-.00327	.00087	-.00011	.00000	.00003	.08771
1200.600	800.260	-.00415	-.00078	-.00017	-.00018	.00003	.08811
1200.600	1000.100	-.00363	-.00173	-.00022	-.00023	.00003	.08663

## REFERENCE DATA

SREF = 2660.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = 10.000 ALLFON = .000  
Y = .000

1A13, EXTERNAL TANK(T10) SEPARATING FROM ORG. 08

(RTJ109) ( 31 JUL 75 )

RUN NO. 238/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.185	299.870	-.18729	-.02420	.00005	-.00046	.00000	.08994
-.105	399.580	-.15319	-.03325	.00001	-.00043	.00001	.09199
.190	802.310	-.13772	-.04494	-.00008	-.00022	.00002	.09285
.274	800.130	-.13720	-.04440	-.00019	-.00024	.00001	.09282
.097	999.330	-.13643	-.04393	.00001	-.00013	.00002	.09390
.041	1299.400	-.14019	-.04600	-.00033	-.00030	.00001	.09325

RUN NO. 239/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
400.440	300.050	-.16369	-.02839	-.00011	-.00039	.00000	.08270
400.390	399.430	-.16254	-.03371	-.00055	-.00042	.00001	.09149
400.410	800.360	-.14192	-.04284	-.00048	-.00030	.00001	.08244
400.340	800.050	-.13709	-.04425	-.00021	-.00019	.00002	.09284
400.390	1000.100	-.13827	-.04438	-.00011	-.00017	.00001	.09356
400.430	1300.300	-.13983	-.04568	-.00031	-.00023	.00002	.08268

DATE 02 AUG 75

1A13 SOURCE DATA

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJTB9) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = 10.000 AILRON = .000  
Y = .000

RUN NO. 240/ 0 RN/L = 8.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.750	300.300	-.18172	-.03892	-.00044	-.00018	.00001	.09091
800.840	400.980	-.15537	-.04208	-.00017	.00003	.00001	.09248
800.680	800.240	-.14630	-.04151	-.00009	-.00021	.00002	.09313
800.680	799.780	-.13673	-.04418	-.00009	-.00021	.00002	.09302
800.790	1000.000	-.13995	-.04460	-.00015	-.00023	.00002	.09285
800.630	1299.600	-.13791	-.04501	-.00035	-.00015	.00002	.09252

RUN NO. 241/ 0 RN/L = 8.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	300.060	-.16960	-.04151	.00000	-.00009	.00002	.09263
1200.700	399.970	-.15148	-.04668	.00000	-.00003	.00002	.09227
1200.600	598.840	-.14661	-.04236	.00008	-.00010	.00002	.09272
1200.800	799.770	-.14218	-.04284	-.00055	-.00033	.00002	.09316
1200.900	1000.370	-.14033	-.04494	-.00039	-.00028	.00002	.09228
1200.800	1299.600	-.13670	-.04418	-.00031	-.00020	.00003	.09261

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = 10.000 AILRON = .000  
Y = .000

RUN NO. 242/ 0 RN/L = 8.57

X	Z	CN	CLM	CY	CYN	CBL	CA
-.643	600.830	-.35185	-.06024	-.00060	-.00049	.00002	.09080
.237	800.550	-.32309	-.08112	-.00044	-.00025	.00001	.09750
-.043	999.640	-.32261	-.08010	-.00041	-.00023	.00001	.09884
-.877	1298.300	-.32567	-.08220	-.00075	-.00035	.00001	.09851

(RTJTB9) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTR = 10.000 AILRON = .000  
 Y = .000

RUN NO. 243/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
401.500	600.700	-.36579	-.06708	-.00069	-.00037	-.00001	.09437
400.160	799.920	-.33516	-.07571	-.00018	-.00031	-.00001	.09713
400.430	1000.200	-.32441	-.08070	-.00028	-.00017	.00000	.09852
400.470	1300.300	-.32541	-.08174	-.00073	-.00024	.00000	.09777

RUN NO. 244/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.970	601.210	-.34181	-.08014	-.00038	-.00014	-.00001	.09650
800.470	800.220	-.33802	-.07512	-.00033	-.00030	.00000	.09799
800.570	1000.000	-.32437	-.08122	-.00071	-.00024	.00000	.09773
800.490	1299.800	-.32488	-.08085	-.00085	-.00022	-.00001	.09735

RUN NO. 245/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	600.720	-.33747	-.08413	-.00045	.00010	-.00001	.09726
1200.300	799.130	-.34035	-.07662	-.00060	-.00028	-.00001	.09846
1200.700	999.560	-.33418	-.07710	-.00052	-.00035	.00000	.09702
1200.700	1299.800	-.32389	-.07978	-.00044	-.00018	.00000	.09729

DATE 02 AUG 75 1A13 SOURCE DATA

1A13 EXTERNAL TANK(T10)SEPARATING FROM ORB. 08

(RTJTB1) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = 10.000 AIRLON = .000  
Y = 200.000

RUN NO. 246/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.097	7.032	-.01498	.00156	-.00753	-.00093	.00003	.08788
.075	100.250	-.01362	.00191	-.00731	.00049	.00004	.08781
.116	199.590	-.00924	.00413	-.00384	.00143	.00004	.08720
.115	302.730	.00017	-.00047	-.00008	-.00023	.00004	.08636
.188	399.670	-.00024	.00003	.00014	-.00020	.00004	.08689
.194	599.820	-.00176	-.00070	-.00007	-.00024	.00004	.08679
.260	799.710	-.00135	.00003	.00024	-.00014	.00004	.08649
.205	1000.300	-.00239	-.00015	.00023	-.00018	.00004	.08767

RUN NO. 247/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
400.350	9.167	-.01658	-.00498	-.00677	-.00427	.00004	.08909
400.350	100.090	-.01584	.00085	-.00727	-.00050	.00003	.08810
400.390	199.330	-.01393	.00371	-.00426	.00140	.00004	.08735
400.330	296.670	-.00499	.00287	-.00204	.00062	.00004	.08668
400.270	396.280	-.00025	.00004	.00018	-.00014	.00005	.08716
400.410	599.090	-.00188	-.00078	.00031	-.00007	.00005	.08687
400.420	799.800	-.00201	.00006	.00053	.00002	.00004	.08648
400.490	1000.100	-.00291	-.00047	-.00005	-.00015	.00005	.08743

RUN NO. 248/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
800.660	9.791	-.01902	-.01755	-.01119	-.00851	.00003	.09094
800.660	99.816	-.02371	-.00408	-.00592	-.00232	.00003	.08765
800.520	204.660	-.02775	.00634	-.00238	-.00096	.00003	.08791
800.490	300.430	-.00901	.00103	-.00239	.00026	.00004	.08766
800.540	400.030	-.00710	.00108	-.00124	.00053	.00004	.08772
800.630	600.030	-.00181	-.00070	.00046	.00006	.00004	.08672
800.600	799.590	-.00287	.00008	.00075	.00019	.00004	.08710
600.610	1000.000	-.00357	-.00116	.00067	.00022	.00004	.06643

(RTJ191) ( 31 JUL 75 )

IA13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVR = 10.000 AILRON = .000  
 Y = 200.000

RUN NO. 249/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.700	10.095	-.04269	-.03101	-.01822	-.00590	.00003	.10245
1200.800	99.775	-.03141	-.01708	-.00523	-.00401	.00003	.09317
1200.800	200.120	-.01393	-.00335	-.00013	-.00215	.00004	.08803
1200.800	299.590	-.01162	-.00059	-.00048	-.00076	.00004	.08833
1200.900	399.530	-.00836	.00038	-.00141	.00038	.00003	.08781
1200.800	599.530	-.00223	.00007	.00059	.00019	.00005	.08683
1200.900	800.300	-.00391	-.00070	.00058	.00016	.00004	.08726
1200.800	1000.000	-.00329	-.00160	.00038	.00023	.00004	.08575

IA13.EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ192) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVR = 10.000 AILRON = .000  
 Y = 200.000

RUN NO. 250/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
.115	300.020	-.16885	-.02861	-.01132	.00337	.00000	.08928
-.075	399.610	-.14280	-.03769	-.00431	.00164	.00003	.07059
.274	602.040	-.13750	-.04472	.00021	-.00020	.00003	.09250
.234	800.040	-.13687	-.04412	.00051	-.00009	.00003	.09213
.096	999.300	-.13624	-.04385	.00029	-.00014	.00002	.09323
.084	1299.400	-.14005	-.04576	.00048	-.00016	.00003	.09205

RUN NO. 251/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
400.440	300.040	-.19174	-.02475	-.00816	.00068	.00000	.09263
400.510	399.940	-.15780	-.03573	-.00430	.00064	.00001	.09055
400.380	600.110	-.13921	-.04416	-.00043	.00027	.00003	.09209
400.480	799.880	-.13705	-.04413	.00040	-.00002	.00003	.09242
400.540	1000.100	-.13839	-.04437	.00027	-.00004	.00003	.09332
400.440	1300.400	-.13981	-.04587	.00055	-.00005	.00002	.09213

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09 (RTJ192) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVR = 10.000 AILRON = .000  
 Y = 200.000

RUN NO. 252/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.600	300.230	-.18553	-.03738	-.00003	-.00200	.00002	.09235
800.770	400.590	-.16208	-.03814	-.00081	-.00092	.00001	.09296
800.810	600.090	-.14515	-.04150	-.00102	.00083	.00002	.09245
800.810	799.730	-.13712	-.04423	.00084	.00010	.00003	.09282
800.740	1000.100	-.14002	-.04458	.00076	.00017	.00003	.09249
800.680	1299.600	-.13782	-.04505	.00048	.00008	.00002	.09193

RUN NO. 253/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	299.970	-.16367	-.04316	-.00580	.00171	.00002	.09183
1200.700	399.840	-.15384	-.04533	.00019	-.00138	.00003	.09263
1200.600	598.800	-.14735	-.04154	-.00079	.00023	.00002	.09231
1200.800	799.990	-.14080	-.04368	.00005	.00042	.00003	.09255
1200.800	1000.200	-.14024	-.04485	.00006	.00012	.00003	.09173
1200.800	1299.600	-.13657	-.04421	.00030	.00001	.00002	.09231

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09 (RTJ193) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVR = 10.000 AILRON = .000  
 Y = 200.000

RUN NO. 254/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
-.395	600.180	-.33481	-.07098	-.00724	.00245	-.00001	.09399
.227	800.180	-.32332	-.08118	-.00035	-.00022	.00000	.09713
-.021	999.600	-.32392	-.08034	.00036	-.00013	.00000	.09853
-.858	1298.300	-.32589	-.08203	.00011	-.00024	.00000	.09770

IA13, EXTERNAL TANK (110) SEPARATING FROM ORB. 09

(RTJTB3) (31 JUL 75)

## REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVT = 10.000 AILRON = .000  
 Y = 200.000

RUN NO. 255/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
401.110	800.840	-.36848	-.06451	-.00524	.00078	-.00002	.09056
400.180	798.940	-.33169	-.07787	-.00230	.00106	.00000	.09688
400.390	999.910	-.32541	-.08092	.00013	-.00011	.00000	.09841
400.520	1300.400	-.32701	-.08195	.00034	-.00013	.00000	.09741

RUN NO. 256/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
800.690	801.300	-.34377	-.07615	-.00153	-.00067	.00000	.09677
800.410	800.070	-.33735	-.07517	-.00259	.00090	-.00001	.09747
800.520	999.950	-.32537	-.08169	.00084	.00004	.00000	.09769
800.430	1299.800	-.32567	-.08114	.00068	.00001	.00000	.09709

RUN NO. 257/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	800.780	-.34538	-.08165	.00139	-.00130	.00000	.09827
1200.300	798.900	-.34388	-.07487	.00048	.00021	-.00001	.09805
1200.700	999.710	-.33324	-.07818	-.00089	.00085	.00000	.09679
1200.700	1299.800	-.32474	-.08006	.00009	-.00012	.00000	.09728

1A13 SOURCE DATA

DATE 02 AUG 75

1A13 EXTERNAL TANK(T) DISSEPARATING FROM ORB. 09

(RTJ94) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = -40.000 AIRLON = .000  
 Y = 300.000

RUN NO. 258/ 0 RN/L = 5.60

X	Z	CN	CLM	CY	CYN	CBL	CA
.009	7.208	-.01442	.00157	-.00741	-.00086	.00003	.08787
.032	100.340	-.01335	.00184	-.00705	.00058	.00003	.08738
.083	199.710	-.00911	.00426	-.00375	.00150	.00004	.08672
.124	302.780	.00024	-.00032	.00035	-.00014	.00004	.08594
-.016	353.780	-.00004	.00021	.00009	-.00015	.00004	.08624
.118	599.980	-.00153	-.00048	-.00019	-.00019	.00004	.08624
.257	799.727	-.00106	.00012	.00025	-.00017	.00004	.08571
.149	1000.400	-.00218	.00001	.00004	-.00021	.00004	.08710

RUN NO. 259/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
400.360	.069	-.01252	-.00659	-.00685	-.00397	.00004	.08874
400.340	100.090	-.01539	.00086	-.00689	-.00055	.00003	.08790
400.370	198.260	-.01387	.00579	-.00411	.00152	.00004	.08687
400.380	296.720	-.00482	.00303	-.00184	.00070	.00005	.08620
400.340	396.220	-.00010	.00026	.00010	.00002	.00004	.08666
400.460	598.990	-.00136	-.00047	.00053	-.00005	.00005	.08627
400.380	799.730	-.00145	.00034	.00052	.00005	.00004	.08503
400.410	1000.000	-.00224	-.00025	.00041	-.00005	.00004	.08677

RUN NO. 260/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.580	9.890	-.01358	-.01817	-.01217	-.00847	.00004	.09043
800.490	99.784	-.01845	-.00549	-.00693	-.00202	.00003	.08793
800.600	204.740	-.02608	.00562	-.00243	-.00091	.00003	.08781
800.650	300.440	-.00877	.00110	-.00250	.00020	.00004	.08772
800.460	400.030	-.00563	.00130	-.00122	.00061	.00004	.08718
800.560	599.990	-.00123	-.00043	.00070	.00013	.00004	.08509
800.560	799.550	-.00222	.00039	.00090	.00022	.00004	.08641
800.500	1000.000	-.00284	-.00076	.00055	.00034	.00005	.08597

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DATE 02 AUG 75

1A13 SOURCE DATA

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJTS4) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
ELEVTR = -40.000 AILRON = .000  
Y = 200.000

RUN NO. 261/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	12.529	-.03444	-.02857	-.01624	-.00588	.00003	.10158
1210.900	99.732	-.02240	-.01739	-.00615	-.00450	.00005	.09329
1200.700	200.230	-.00913	-.00466	-.00043	-.00210	.00004	.08827
1200.800	299.550	-.01073	-.00042	-.00061	-.00079	.00005	.08811
1200.800	399.470	-.00790	.00047	-.00137	-.00035	.00004	.08757
1200.700	599.370	-.00178	.00036	.00050	.00024	.00004	.08631
1200.900	800.120	-.00320	-.00032	.00049	.00024	.00004	.08663
1200.800	1000.000	-.00266	-.00130	.00026	.00017	.00004	.08526

1A13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJTS5) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2650.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = -40.000 AILRON = .000  
Y = 200.000

RUN NO. 262/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
.214	300.060	-.16910	-.02791	-.01124	.00346	.00000	.08889
.023	399.550	-.14213	-.03709	-.00446	.00194	.00002	.09003
.223	602.110	-.13655	-.04417	.00008	-.00011	.00003	.09197
.191	799.860	-.13582	-.04355	.00001	-.00013	.00003	.09150
.029	999.320	-.13581	-.04359	.00045	-.00020	.00003	.09292
.193	1299.500	-.13938	-.04547	.00022	-.00017	.00003	.09172

RUN NO. 263/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
400.370	299.980	-.17871	-.02990	-.00885	.00112	.00001	.09284
400.380	399.970	-.15740	-.03497	-.00413	.00071	.00002	.09032
400.550	600.200	-.13850	-.04358	-.00048	.00033	.00003	.09153
400.400	799.900	-.13576	-.04356	.00038	.00002	.00003	.09168
400.450	1000.200	-.13704	-.04381	.00024	-.00005	.00003	.09267
400.540	1300.300	-.13831	-.04535	.00057	-.00008	.00003	.09138

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IA13 SOURCE DATA

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IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJT95) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVTR = -40.000 AILRON = .000  
 Y = 200.000

RUN NO. 264/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.680	300.250	-1.7545	-.04008	-.00155	-.00127	.00001	.09249
800.730	400.750	-.15304	-.04225	-.00091	-.00083	.00002	.09306
800.740	600.210	-.14479	-.04121	-.00103	.00087	.00002	.09206
800.590	799.750	-.13589	-.04364	.00093	.00012	.00003	.09209
800.670	1000.000	-.13853	-.04393	.00063	.00014	.00003	.09179
800.750	1299.600	-.13641	-.04459	.00033	.00003	.00003	.09138

RUN NO. 265/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	300.120	-.15171	-.04725	-.00438	.00088	.00003	.09164
1200.700	399.880	-.15019	-.04616	-.00007	-.00118	.00003	.09260
1200.600	598.770	-.14671	-.04129	-.00054	.00027	.00002	.09192
1200.730	799.760	-.14001	-.04310	.00003	.00040	.00003	.09203
1201.000	1000.100	-.13954	-.04437	.00068	.00012	.00003	.09135
1200.700	1299.500	-.13530	-.04377	.00000	.00004	.00003	.09182

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTR = -40.000 AILRON = .000  
 Y = 200.000

IA13,EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJT96) ( 31 JUL 75 )

RUN NO. 266/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
-.505	600.330	-.33334	-.07009	-.00713	.00256	-.00001	.09348
.193	800.460	-.32205	-.08042	-.00002	-.00015	.00000	.09657
.057	999.470	-.32193	-.07949	-.00014	-.00022	.00001	.09782
-.904	1298.400	-.32457	-.08165	.00052	-.00021	.00001	.09723

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IA13 SOURCE DATA

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IA13 EXTERNAL TANK(T10)SEPARATING FROM ORG. 09

(RTJTS6) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTR = -40.000 AILRON = .000  
 Y = 200.000

RUN NO. 267/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
401.110	600.500	-.35720	-.06838	-.00470	.00088	-.00001	.09438
400.240	797.460	-.33218	-.07666	-.00259	.00116	.00000	.09629
400.270	999.850	-.32320	-.07991	-.00028	-.00024	.00000	.09785
400.510	1300.300	-.32424	-.08102	.00080	-.00008	.00000	.09682

RUN NO. 268/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.940	601.360	-.34591	-.07667	-.00173	-.00065	.00000	.09654
800.460	800.020	-.33581	-.07433	-.00207	.00000	.00000	.09690
800.560	1000.000	-.32331	-.08062	.00008	-.00005	.00001	.09694
800.450	1299.900	-.32326	-.08021	.00054	.00002	.00000	.09649

RUN NO. 269/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1201.000	600.750	-.33799	-.08359	.00049	-.00053	.00000	.09814
1200.200	798.780	-.34119	-.07398	-.00035	.00009	.00000	.09751
1200.700	999.610	-.33179	-.07720	-.00095	.00082	.00000	.09625
1200.600	1299.700	-.32228	-.07913	.00010	-.00005	.00000	.09663

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IA13 SOURCE DATA

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IA13,EXTERNAL TANK(110)SEPARATING FROM ORB. 08

(RTJ197) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1403.0000 IN. XT  
 LBREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BRREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVTR = -40.000 AILRON = .000  
 Y = .000

RUN NO. 270/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.174	2.753	-.01438	-.00184	.00008	-.00031	.00004	.08900
.191	100.650	-.01253	-.00021	-.00011	-.00034	.00004	.08812
.100	198.210	-.01317	.00473	.00054	-.00023	.00004	.08729
.128	301.930	-.00004	.00053	-.00009	-.00013	.00005	.08592
.142	399.750	.00074	.00046	-.00005	-.00018	.00004	.08583
.147	599.950	-.00101	-.00029	-.00011	-.00007	.00005	.08590
.180	799.830	-.00020	.00050	-.00010	-.00013	.00005	.08536
.160	1000.300	-.00110	.00054	-.00031	-.00017	.00005	.08642

RUN NO. 271/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.390	-1.488	-.00875	-.01712	.00001	.00027	.00005	.08774
400.320	100.030	-.01621	-.00302	-.00006	-.00042	.00005	.08872
400.360	200.150	-.02042	.00552	.00025	-.00046	.00004	.08741
400.390	299.990	-.00606	.00300	.00008	-.00030	.00004	.08634
400.370	399.970	-.00226	.00052	-.00028	-.00022	.00004	.08546
400.380	599.830	-.00082	-.00025	.00060	-.00011	.00005	.08588
400.360	799.690	-.00071	.00070	-.00013	-.00025	.00005	.08548
400.440	1000.000	-.00180	.00004	-.00027	-.00011	.00005	.08617

RUN NO. 272/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.520	1.647	-.03778	-.04025	.00174	.00065	.00002	.09879
800.570	99.835	-.02507	-.01037	.00119	-.00001	.00005	.08863
800.560	200.140	-.02455	.00395	.00018	-.00006	.00004	.08766
800.580	300.780	-.00886	.00039	.00008	-.00019	.00004	.08740
800.500	400.050	-.00745	.00133	-.00021	-.00013	.00004	.08712
800.590	599.980	-.00088	-.00031	-.00008	-.00016	.00005	.08549
800.630	799.570	-.00148	.00068	-.00004	-.00011	.00004	.08589
800.690	1000.100	-.00238	-.00044	-.00030	-.00017	.00004	.08528

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 08

(RTJT97) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 ELEVT = -40.000 AILRON = .000  
 Y = .000

RUN NO. 273/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	-711	-03772	-03629	.00101	-00030	.00005	.10613
1200.700	99.628	-02678	-01897	.00079	.00009	.00006	.09693
1200.800	200.180	-01302	-00510	.00007	.00003	.00004	.08866
1200.800	299.340	-00888	-00189	-00014	-00008	.00005	.08803
1200.700	399.500	-00787	-00011	-00007	-00014	.00005	.08737
1200.700	599.320	-00250	.00089	.00006	-00011	.00004	.08500
1200.800	800.170	-00290	-00028	-00047	-00021	.00005	.08539
1200.800	999.990	-00193	-00101	-00048	-00030	.00005	.08485

IA13.EXTERNAL TANK(T10)SEPARATING FROM ORB. 09

(RTJT98) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 ELEVT = -40.000 AILRON = .000  
 Y = .000

RUN NO. 274/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.150	299.840	-016875	-02356	-00049	-00045	.00001	.08875
-.026	399.650	-015212	-03277	-00027	-00051	.00003	.09050
.176	602.400	-013646	-04413	-00005	-00025	.00003	.09128
.272	800.130	-013523	-04335	-00015	-00021	.00003	.09094
.106	999.270	-013432	-04304	-00033	-00025	.00003	.09224
.031	1299.500	-013814	-04529	-00058	-00043	.00003	.09158

RUN NO. 275/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
400.460	299.990	-019228	-02838	-00032	-00050	.00002	.09218
400.500	399.540	-016151	-03317	-00031	-00038	.00002	.09027
400.470	800.410	-014153	-04226	-00029	-00033	.00003	.09098
400.260	799.820	-013552	-04338	-00016	-00024	.00003	.09102
400.440	1000.100	-013653	-04348	-00050	-00024	.00003	.09195
400.480	1300.300	-013725	-04499	-00044	-00030	.00003	.09101

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJT98) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
ELEVTR = -40.000 AILRON = .000  
Y = .000

RUN NO. 278/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
800.710	300.330	-1.17575	-.04045	-.00050	-.00030	.00002	.09040
800.800	401.080	-.15344	-.04251	-.00028	-.00018	.00003	.09196
800.680	600.340	-.14564	-.04113	.00002	-.00021	.00003	.09157
800.680	799.850	-.13551	-.04345	-.00031	-.00027	.00003	.09132
800.760	1000.200	-.13779	-.04363	-.00042	-.00030	.00003	.09118
800.660	1299.600	-.13535	-.04405	-.00036	-.00020	.00003	.09091

RUN NO. 277/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.900	300.030	-.16175	-.04366	-.00001	-.00014	.00003	.09196
1200.700	400.080	-.14799	-.04766	.00009	-.00004	.00003	.09203
1200.600	598.900	-.14563	-.04210	-.00008	-.00013	.00003	.09138
1200.900	799.730	-.14111	-.04216	-.00041	-.00033	.00002	.09164
1200.600	1000.100	-.13879	-.04407	-.00057	-.00026	.00003	.09074
1200.700	1299.400	-.13424	-.04318	-.00027	-.00017	.00003	.09122

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
ELEVTR = -40.000 AILRON = .000  
Y = .000

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJT99) ( 31 JUL 75 )

RUN NO. 278/ 0 RN/L = 8.60

X	Z	CN	CLM	CY	CYN	CBL	CA
-717	600.770	-.35111	-.05999	-.00039	-.00043	-.00001	.08934
.222	800.650	-.32204	-.08014	-.00086	-.00028	.00001	.09613
-.019	999.640	-.32160	-.07910	-.00067	-.00025	.00001	.09732
-.944	1298.500	-.32278	-.08124	-.00120	-.00044	.00000	.09696

DATE 02 AUG 75

1A13 SOURCE DATA

1A13,EXTERNAL TANK(110)SEPARATING FROM ORB. 09

(RTJ199) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2590.0000 50.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 ELEVTB = -40.000 AILRON = .000  
 Y = .000

RUN NO. 279/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
401.410	600.760	-36800	-06814	-00092	-00038	-00001	09348
400.090	797.000	-33672	-07484	-00078	-00038	.00000	09591
400.180	999.750	-32265	-07947	-00062	-00028	.00000	09710
400.390	1300.400	-32339	-08069	-00066	-00037	.00001	09629

RUN NO. 280/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
801.010	601.340	-34125	-08007	-00083	-00014	.00000	09580
800.540	800.150	-33692	-07436	-00089	-00036	.00000	09659
800.840	1000.300	-32355	-08017	-00111	-00037	.00000	09641
800.510	1299.700	-32242	-07952	-00056	-00028	.00000	09592

RUN NO. 281/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
1200.800	600.760	-33342	-08571	-00013	-00012	.00001	09678
1200.200	798.880	-33907	-07610	-00052	-00031	.00000	09736
1200.500	999.580	-33355	-07624	-00045	-00033	.00000	09596
1200.600	1299.700	-32194	-07863	-00092	-00029	.00000	09616

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ100) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.480 PTOTAL = 11.600  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = .000 PCMR = 1500.000

RUN NO. 303/ 0 RN/L = .71

X	Z	CN	CLM	CY	CYN	CBL	CA
.245	-.085	.00155	-.22743	-.33710	-.03477	-.00383	.06407
.205	49.901	.07620	-.24902	-.58037	-.09204	.01669	.06450
.234	100.040	.23018	-.22442	-.79746	-.12042	.03081	.09011
.115	150.390	.43219	-.17275	-.91489	-.12959	.03416	.11428
.138	200.410	.59856	-.13274	-.87574	-.12912	.03599	.12600
.159	300.100	.76054	-.08187	-.57839	-.12501	.03497	.15002
.078	400.080	.70477	-.05622	-.29069	-.09995	.03056	.15692
.260	601.090	.53351	-.02805	-.10191	-.06460	.01513	.15448
.128	801.060	.37843	.00423	-.06459	-.02832	.00854	.14201
-.754	1000.100	.36563	-.06031	-.03398	-.01173	.00654	.15258

RUN NO. 304/ 0 RN/L = .71

X	Z	CN	CLM	CY	CYN	CBL	CA
300.230	.178	.20535	-.03877	-.56375	.06211	-.04534	.15419
300.510	48.373	.01071	-.00313	-.74553	.08327	-.01565	.14280
300.290	99.754	.00022	.00319	-.93053	.09496	.00633	.15694
300.330	151.540	.16796	-.00672	-.95482	.08479	.02390	.15753
300.280	201.880	.36939	-.02475	-.85614	.06876	.02844	.16140
300.380	299.870	.50929	-.02973	-.55927	.03171	.02658	.16864
300.330	400.270	.8330	-.02180	-.31841	.00425	.01613	.15256
300.330	599.870	.33352	.00069	-.13299	-.01395	.00576	.15332
300.420	798.220	.38263	-.09567	-.09007	.01156	-.00197	.14072
300.520	999.020	.41662	-.17669	-.04347	.00814	.00186	.15751

RUN NO. 305/ 0 RN/L = .71

X	Z	CN	CLM	CY	CYN	CBL	CA
600.430	.661	.49856	-.19887	-.46195	.13753	-.06438	.05680
600.480	51.034	.34568	-.14528	-.71919	.22171	-.05114	.10940
600.520	99.583	.14487	-.06218	-.94246	.31327	-.01700	.15741
600.480	149.210	.24931	-.09504	-.100730	.33359	.00138	.15195
600.400	199.000	.39574	-.14802	-.94247	.30349	.00872	.15120
600.530	299.820	.50614	-.17184	-.64522	.20075	.01116	.15436
600.520	398.950	.48262	-.15919	-.33944	.10243	.01002	.14338
600.470	601.370	.31971	-.08711	-.16211	.03538	-.00377	.14537
600.470	800.720	.44356	-.21703	-.10027	.03986	-.01362	.14917
600.580	998.800	.43281	-.25488	-.04268	.02023	-.00379	.16991



(RTJ101) ( 31 JUL 75 )

1A13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2680.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 308/ 0 RN/L = .88

PARAMETRIC DATA

MACH = 4.480 PTOTAL = 10.800  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 200.000 PCMR = 1500.000

X	Z	CN	CLM	CY	CYN
599.510	-.208	-.09192	-.01912	-.02821	-.01040
600.490	50.455	-.09453	-.02142	-.02610	-.01042
600.580	100.610	-.09812	-.02552	-.01670	-.01007
600.520	150.520	-.09596	-.02955	-.00801	-.00743
600.630	200.240	-.10156	-.03013	-.01414	-.00971
600.540	300.440	-.05607	-.03304	-.00765	-.00625
600.610	400.560	-.09328	-.03499	-.00051	-.00258
600.570	599.610	-.07708	-.02673	-.00806	-.00734
600.700	799.080	-.07690	-.02434	-.00894	-.00387
600.710	999.000	-.07308	-.02124	-.00152	-.00088

1A13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ102) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2680.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 307/ 0 RN/L = 1.74

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 750.000 PCMR = 750.000

X	Z	CN	CLM	CY	CYN	CBL	CA
.297	.275	-.01118	-.03743	-.06852	-.00007	-.00447	.10515
.163	48.902	-.01193	-.04475	-.07995	-.02638	.00336	.10976
.158	98.555	-.03011	-.01667	-.12548	-.04512	.00945	.14614
.094	148.000	-.00040	.00390	-.15444	-.05099	.01024	.14834
.271	199.880	.04608	.01311	-.16283	-.04703	.00731	.14633
.278	299.610	.07999	.03862	-.12604	-.03741	.00337	.15527
.228	400.010	.09255	.03943	-.09362	-.02376	.00105	.16045
.245	801.070	.08101	.00450	-.03536	-.00183	.00004	.15982
.158	801.150	.13580	-.05818	-.00913	-.00145	.00360	.18370
-.005	999.890	.03608	-.01483	.00025	-.00088	.00059	.17327

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ102) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2800.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1200.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1800.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = .000 PCMPR = 780.000

RUN NO. 308/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
300.320	1.227	-.00995	.01041	-.08014	-.00098	-.00800	.14080
300.310	48.765	-.07515	.02589	-.15212	.00146	-.00718	.16170
300.380	98.649	-.09793	.03651	-.19229	.00808	-.00450	.16191
300.320	190.940	-.05218	.03654	-.20056	.00508	.00157	.15548
300.380	200.980	.00789	.02415	-.17484	-.00524	.00463	.15289
300.350	301.530	.04524	.02078	-.12093	.00055	.00069	.14756
300.400	402.110	.06439	.01654	-.08959	.00254	-.00048	.15329
300.440	599.900	.11584	-.03810	-.04309	.01134	-.00094	.17088
300.500	798.780	.12656	-.07572	-.01256	.00524	-.00207	.17367
300.510	999.170	.01049	-.01044	-.00088	.00057	.00089	.17080

RUN NO. 309/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
600.490	-.046	.04895	-.01489	-.09815	.02488	-.01686	.14383
600.530	51.214	.03370	-.00824	-.16787	.04161	-.01594	.15218
600.530	100.110	-.04413	.02468	-.21222	.06288	-.01049	.15514
600.510	149.580	-.03474	.02141	-.22009	.07103	-.00545	.15272
600.470	199.080	-.00687	.01386	-.20581	.06806	-.00481	.15222
600.530	298.590	.05352	-.00645	-.13412	.04026	-.00285	.15255
600.420	400.210	.07043	-.01651	-.09924	.03388	-.00383	.15445
600.530	601.130	.17009	-.09667	-.05234	.02547	.00334	.18265
600.510	800.380	.03877	-.02680	-.01110	.00707	.00114	.16714
600.580	999.830	-.04656	.02428	.00407	-.00230	.00077	.16706

RUN NO. 310/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
900.870	-.226	.14581	-.08410	-.09467	.04763	-.02698	.16422
900.560	50.781	.15439	-.07470	-.15734	.08386	-.02696	.16939
900.630	98.708	.09922	-.06925	-.16882	.09226	-.02664	.16270
900.640	149.800	.08758	-.05228	-.24032	.13661	-.02002	.17113
900.800	200.200	.08998	-.05285	-.23535	.13458	-.01657	.16876
900.640	300.170	.12047	-.06702	-.16917	.10025	-.01510	.17182
900.650	400.810	.14333	-.08001	-.11220	.08748	-.01003	.17575
900.570	600.230	.18221	-.13338	-.04610	.03282	-.00204	.17292
900.580	798.810	-.02961	.01098	.00149	-.00052	.00077	.15839
900.810	999.950	-.05793	.03230	.00478	-.00267	.00070	.17240

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(RTJ103) (31 JUL 75)

## REFERENCE DATA

SREF = 2660.0000 60.FT. XREF = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YREF = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZREF = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 314/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
.202	-.572	-.10664	.03830	-.10000	-.01136	-.00631	.17786
.141	50.466	-.08426	.03256	-.12734	-.00765	-.01113	.17358
.114	100.520	-.06708	.03208	-.14448	-.00274	-.01283	.16648
.242	150.350	-.05269	.03197	-.15742	.00325	-.01370	.16277
.236	200.400	-.03255	.02963	-.16123	.00708	-.01320	.16099
.258	259.830	-.03300	.02607	-.16877	.00098	-.00907	.15985
.267	400.870	.00990	.02361	-.17018	.01160	-.00988	.17476
.174	599.890	.10612	-.02697	-.11491	.02752	-.00604	.17842
.244	799.020	.13915	-.07350	-.07185	.03046	-.00837	.17906
.227	999.110	.03305	-.01904	-.02917	.01635	.00055	.17173

RUN NO. 313/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
300.260	-.715	-.09257	.03929	-.12723	.01958	-.01791	.15926
300.290	48.772	-.07444	.03749	-.13897	.03065	-.01717	.16344
300.340	99.494	-.03143	.03234	-.15398	.04189	-.02089	.16579
300.280	149.800	-.01007	.02794	-.18116	.04037	-.02528	.16213
300.300	200.580	.00788	.01767	-.19343	.04259	-.02387	.16384
300.380	299.730	.02290	-.00551	-.20467	.04808	-.01813	.17004
300.260	399.890	.07236	-.02469	-.17559	.05163	-.01309	.17184
300.340	600.790	.15069	-.08046	-.11462	.04946	-.01017	.17529
300.410	800.890	.09622	-.08393	-.05912	.03378	-.00737	.17235
300.330	999.930	-.00739	-.00126	-.01380	.01019	.00130	.16893

RUN NO. 312/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
600.530	.015	-.05219	.02246	-.14549	.06827	-.02699	.16235
600.440	50.259	-.03906	.01779	-.15466	.07358	-.02689	.16327
600.550	100.430	-.01618	.00978	-.14948	.07358	-.02180	.16706
600.540	150.540	.02708	-.00965	-.14391	.07639	-.02338	.16836
600.560	200.370	.06348	-.02523	-.14092	.06974	-.01780	.17121
600.460	300.360	.09713	-.04722	-.13406	.08335	-.02465	.17587
600.530	399.830	.17197	-.10136	-.16646	.08881	-.02111	.18050
600.560	599.570	.16302	-.11315	-.19965	.08195	-.01544	.17389
600.840	799.760	.01974	-.01933	-.03215	.02288	.00127	.16690
600.570	999.610	-.05051	.03128	.00493	-.00281	.00078	.17118

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 200.000 PCMPER = 750.000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13,SR8(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ103) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 311/ 0 RN/L = 1.74

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 200.000 PCMR = 750.000

X	Z	CN	CLM	CY	CYN	CBL	CA
900.610	-1.320	.02605	-.02687	-.13933	.09902	-.02742	.17592
900.550	49.583	.08180	-.06145	-.12901	.08786	-.02685	.17760
900.560	99.759	.13614	-.09715	-.12690	.08688	-.02787	.17812
900.590	150.220	.17787	-.12707	-.13526	.09357	-.03306	.17812
900.550	200.150	.20452	-.15131	-.14799	.09611	-.03640	.17225
900.650	299.950	.20963	-.15263	-.15280	.09988	-.03159	.16643
900.830	400.420	.21062	-.15183	-.16805	.11249	-.01842	.17464
900.620	600.340	.05509	-.04865	-.05047	.03720	-.00281	.15689
900.610	799.890	-.05464	.02930	.00532	-.00319	.00084	.16738
900.720	999.910	-.05761	.03195	.00486	-.00277	.00073	.17267

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 315/ 0 RN/L = 1.75

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCMR = 750.000

X	Z	CN	CLM	CY	CYN	CBL	CA
.260	-.069	-.09940	.04397	-.11917	.02768	-.01144	.18396
.224	49.902	-.09377	.04428	-.13290	.03114	-.01273	.18342
.215	99.825	-.08902	.04318	-.14648	.03658	-.01465	.18263
.197	149.860	-.08053	.03857	-.15786	.04287	-.01692	.18086
.203	199.520	-.08983	.03303	-.18134	.04762	-.01785	.17974
.189	299.450	-.03973	.02259	-.16370	.05731	-.01778	.17982
.237	399.490	-.00190	.00715	-.17119	.06480	-.01673	.18143
.208	600.480	.08401	-.04141	-.14241	.06253	-.01235	.18227
.293	800.280	.11991	-.07956	-.08598	.04774	-.01725	.17987
.370	999.680	-.00291	-.00233	-.03082	.02070	.00160	.17104

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM OST10

(RTJON) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2630.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCMR = 750.000

RUN NO. 316/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
300.300	.334	-.09000	.05099	-.15203	.08835	-.02190	.18427
300.320	50.075	-.07350	.03929	-.16429	.09608	-.02493	.18290
300.330	100.010	-.05779	.02966	-.17409	.10125	-.02680	.18296
300.330	150.110	-.04239	.02128	-.18226	.10511	-.02755	.18461
300.390	200.110	-.02034	.00910	-.18496	.10723	-.02742	.18682
300.380	300.250	.02250	-.01625	-.17543	.09981	-.02171	.18626
300.310	400.200	.05812	-.03870	-.16655	.09468	-.01825	.18712
300.340	500.180	.12052	-.09085	-.11285	.06629	-.01936	.18113
300.340	799.550	.02803	-.02648	-.05381	.03569	-.00241	.16857
300.410	999.790	-.04881	.02613	.00049	.00025	.00075	.17000

RUN NO. 317/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
600.470	-.120	-.07524	.04657	-.18153	.14148	-.03516	.18865
600.420	49.794	-.05652	.03213	-.17573	.13126	-.03025	.18793
600.490	99.834	-.03306	.01663	-.17407	.12797	-.02898	.18916
600.400	149.910	-.00341	-.00364	-.16798	.12107	-.02594	.18956
600.430	200.000	.03278	-.02088	-.15918	.11324	-.02507	.18938
600.540	299.990	.09132	-.07202	-.13360	.09175	-.02101	.18348
600.480	399.820	.12643	-.09969	-.11569	.07852	-.02485	.17917
600.590	599.820	.06433	-.05989	-.07080	.04973	-.01426	.16562
600.520	800.120	-.04374	.02205	-.00341	.00322	.00097	.16514
600.490	999.930	-.05832	.03250	.00478	-.00272	.00070	.17316

RUN NO. 318/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
900.500	.154	-.05014	.02734	-.03744	.08527	-.02858	.17504
900.640	50.187	-.01148	-.00085	-.05345	.08118	-.02704	.17471
900.560	100.320	.04648	-.04243	-.09183	.07591	-.02922	.17735
900.590	150.300	.09591	-.08281	-.07993	.06429	-.03206	.17482
900.560	199.870	.12374	-.10323	-.06705	.05207	-.03327	.17072
900.500	299.560	.13241	-.11534	-.06346	.04851	-.03805	.16599
900.620	399.610	.06809	-.07036	-.05528	.04125	-.02412	.15717
900.600	600.160	-.05438	.02911	.00457	-.00200	.00069	.16474
900.670	799.960	-.05833	.03248	.00483	-.00269	.00068	.17189
900.700	999.860	-.05820	.03230	.00467	-.00266	.00067	.17379

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ105) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 319/ 0 RN/L = 1.75

X	Z	CLM	CY	CYN	CBL	CA
-0.016	799.820	-0.05423	.02924	.00160	-0.00069	.17122

RUN NO. 320/ 0 RN/L = 1.75

X	Z	CLM	CY	CYN	CBL	CA
300.290	800.020	-0.05768	.03198	.00469	-0.00264	.17258

RUN NO. 321/ 0 RN/L = 1.75

X	Z	CLM	CY	CYN	CBL	CA
600.500	799.970	-0.05841	.03280	.00468	-0.00267	.17514

RUN NO. 322/ 0 RN/L = 1.75

X	Z	CLM	CY	CYN	CBL	CA
900.580	799.940	-0.05820	.03276	.00467	-0.00268	.17533

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 800.000 PCMR = 750.000

1A13,SR8(SB)WITH PLUMES SEPARATING FROM 0810 (RT,108) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 OBETA = .000  
Y = .000 PCWBR = 1500.000

RUN NO. 323/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
.323	-.007	.01599	-.10014	-.12112	-.00257	-.00587	.08813
.369	48.859	.02547	-.09792	-.21513	-.03356	.00736	.09344
.259	106.070	.05728	-.08160	-.30238	-.05365	.01413	.11597
.211	150.230	.13989	-.06901	-.36818	-.07173	.01685	.13422
.207	200.610	.21524	-.04922	-.33127	-.07746	.01972	.13391
.214	300.110	.25778	.00036	-.22429	-.06203	.01345	.13479
.084	400.020	.21462	.04614	-.13278	-.04971	.00735	.15077
.200	599.900	.14352	.02571	-.06710	-.01622	.00042	.14430
.164	799.970	.17835	-.03509	-.03636	-.00235	.00028	.15681
-.670	1000.100	.23461	-.10873	-.01473	-.00012	.00098	.17955

RUN NO. 324/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
300.180	.179	.07553	-.01121	-.21021	.01348	-.01528	.13004
300.280	47.807	-.04988	.02098	-.30594	.02148	-.00943	.15458
300.400	98.986	-.08910	.03050	-.39471	.02862	-.00260	.16302
300.300	151.900	-.00461	.02705	-.42113	.02875	.00477	.15390
300.310	202.030	.08784	.01465	-.38109	.01482	.00991	.14725
300.400	259.810	.16485	.00249	-.23324	.00213	.00988	.14025
300.210	401.850	.15825	.00949	-.14485	-.00123	.00329	.14157
300.550	599.930	.13818	-.01428	-.08443	.01542	-.00701	.14467
300.450	799.990	.20873	-.09338	-.04228	.01170	-.00323	.16685
300.510	999.750	.26089	-.16398	-.02218	.01061	.00101	.17708

RUN NO. 325/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
600.640	-.542	.13459	-.06274	-.20162	.05649	-.03201	.15046
600.510	51.615	.10091	-.03363	-.33787	.10120	-.02729	.15546
600.460	99.917	.02228	-.00258	-.40678	.12016	-.01102	.15000
600.410	149.260	.05434	-.01587	-.43598	.13340	-.00528	.14367
600.550	198.690	.10418	-.03515	-.39788	.12603	-.00200	.14002
600.540	299.230	.17658	-.05282	-.23928	.07433	.00518	.14239
600.450	399.120	.16685	-.04768	-.15391	.04648	-.00140	.14237
600.380	600.150	.19017	-.07326	-.10935	.04310	-.01190	.15639
600.570	800.740	.25943	-.16402	-.04726	.02577	-.00443	.17572
600.530	999.090	.10293	-.07596	-.01830	.01215	-.00195	.15736

DATE 02 AUG 75 1A13 SOURCE DATA

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ106) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 328/ 0 RN/L = 1.75

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = .000 PCHMR = 1500.000

X	Z	CN	CLM	CY	CYN	CBL	CA
900.700	.007	.35738	-.22528	-.20417	.10524	-.05682	.16789
900.670	49.910	.32698	-.20722	-.32019	.17436	-.05568	.16333
900.580	100.300	.26339	-.16691	-.40128	.21602	-.04735	.16721
900.530	149.550	.24999	-.14504	-.44430	.25598	-.03314	.16947
900.590	198.620	.23409	-.14466	-.42481	.23446	-.02320	.16039
900.810	300.300	.24109	-.14138	-.27568	.15693	-.01264	.16316
900.600	400.340	.21857	-.12444	-.17785	.09920	-.01174	.15808
900.580	602.500	.26830	-.16795	-.11512	.06537	-.01841	.17062
900.730	799.940	.20406	-.15410	-.03365	.02469	-.00694	.15535
900.720	999.640	-.01797	.00168	-.00010	.00035	.00085	.14970

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 330/ 0 RN/L = 1.76

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = .000 PCHMR = 1500.000

X	Z	CN	CLM	CY	CYN	CBL	CA
.239	-1.155	-.10443	.02918	-.15748	.00069	-.01544	.16528
.301	50.344	-.09056	.03722	-.18746	-.00132	-.01721	.15919
.211	101.010	-.04595	.01699	-.21623	-.00854	-.01589	.14629
.079	150.780	-.00568	.00312	-.25685	-.01058	-.01708	.13359
.121	200.810	.02247	.00514	-.26257	-.01698	-.01300	.13044
.175	301.570	.07005	.01796	-.26116	-.02206	-.00769	.13458
.188	400.940	.09266	.02665	-.24301	-.01497	-.00574	.14712
.336	599.900	.11874	.00485	-.18977	.01546	-.00066	.16053
.235	799.920	.19564	-.05810	-.12377	.03045	-.01140	.17519
.262	999.930	.26768	-.14539	-.08203	.03159	-.00544	.18173



DATE 02 AUG 75 1A13 SOURCE DATA

(RTJ107) ( 31 JUL 75 )

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 200.000 PCMR = 1500.000

RUN NO. 328/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
300.330	-945	-06059	.02586	-.24651	.01790	-.03645	.16644
300.360	49.150	-.01880	.01447	-.28737	.03052	-.03724	.15675
300.290	99.674	.00861	.01363	-.30867	.03601	-.03652	.15339
300.320	149.590	.02061	.01167	-.31878	.03567	-.03471	.15070
300.390	199.700	.02909	.01177	-.32457	.03895	-.02986	.14646
300.250	299.960	.04095	.00426	-.30516	.03242	-.02184	.15519
300.300	400.060	.10465	-.01541	-.27234	.04055	-.01694	.16138
300.340	600.500	.19370	-.07601	-.18760	.05935	-.01706	.16956
300.430	801.330	.27959	-.15191	-.12248	.05301	-.01412	.17991
300.330	1000.500	.22120	-.14617	-.07568	.04427	-.01386	.17218

RUN NO. 328/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
600.450	.030	-.06033	.02660	-.22803	.08205	-.04379	.15155
600.500	50.261	-.01618	.00821	-.22105	.05538	-.04204	.14158
600.540	100.310	.01667	-.00438	-.20783	.04524	-.03441	.14003
600.590	150.180	.03263	-.00976	-.22666	.04805	-.03187	.14259
600.570	200.720	.05391	-.01933	-.24293	.05599	-.02897	.14262
600.520	301.270	.03308	-.02935	-.22940	.04827	-.01873	.14394
600.430	400.860	.14182	-.05681	-.22912	.06394	-.01997	.15152
600.820	599.860	.27340	-.16386	-.18547	.09226	-.01978	.17423
600.470	799.240	.27052	-.18350	-.10986	.06707	-.01088	.17148
600.690	999.220	.06529	-.05255	-.04163	.02869	-.00068	.15921

RUN NO. 327/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
900.580	.507	.04569	-.03963	-.14841	.08642	-.04356	.17196
900.640	49.921	.07450	-.05036	-.18286	.08486	-.03921	.15480
900.630	99.762	.10320	-.06620	-.17672	.08446	-.03610	.15181
900.630	149.830	.12850	-.07261	-.19825	.08579	-.03374	.15537
900.640	199.000	.14574	-.08021	-.23161	.09785	-.03293	.15663
900.710	298.540	.18195	-.09923	-.23271	.10373	-.03205	.16014
900.530	399.790	.25727	-.14434	-.21884	.10979	-.03820	.16607
900.620	600.450	.25849	-.18150	-.14693	.09814	-.01127	.16001
900.630	800.160	.08832	-.07505	-.04100	.03036	-.00460	.14417
900.590	999.740	-.04812	.02292	.00488	-.00300	.00088	.16016

DATE 02 AUG 75

IA13 SOURCE DATA

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(RTJ108) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2650.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 331/ 0 RN/L = 1.77

X	Z	CN	CLM	CY	CYN	CBL	CA
.187	-.191	-.15965	.05378	-.14420	.00317	-.01171	.19371
.244	49.624	-.14825	.04865	-.17489	.00912	-.01507	.19073
.219	99.508	-.13059	.04480	-.20362	.01349	-.01791	.18945
.233	149.520	-.10801	.04155	-.22769	.01774	-.02085	.18374
.201	199.640	-.08511	.03847	-.24579	.02300	-.02240	.17971
.211	298.920	-.03141	.03101	-.27005	.03447	-.02201	.16903
.240	399.930	.01781	.02103	-.27960	.04457	-.02166	.17221
.208	599.920	.10891	-.01731	-.25210	.07050	-.01926	.17094
.414	801.190	.21684	-.10168	-.18138	.07161	-.01314	.18435
.319	999.000	.22089	-.13511	-.11959	.06210	-.01840	.17901

RUN NO. 332/ 0 RN/L = 1.77

X	Z	CN	CLM	CY	CYN	CBL	CA
300.400	1.258	-.11041	.04666	-.18851	.05140	-.02337	.17028
300.390	49.952	-.10991	.04619	-.21425	.06049	-.02722	.17095
300.200	100.050	-.09941	.04122	-.23850	.08166	-.03004	.17170
300.400	150.220	-.07611	.03221	-.25253	.09191	-.03050	.17265
300.410	200.350	-.04529	.02078	-.26149	.10135	-.03040	.17369
300.330	300.910	.01897	-.00334	-.28068	.11570	-.03021	.17772
300.470	400.550	.08110	-.03334	-.30124	.11259	-.02759	.17991
300.380	600.630	.19270	-.09852	-.23510	.10736	-.02021	.18621
300.490	799.350	.26221	-.15370	-.16123	.09364	-.02037	.17942
300.550	999.030	.14450	-.10732	-.08199	.05261	-.01590	.16840

RUN NO. 333/ 0 RN/L = 1.77

X	Z	CN	CLM	CY	CYN	CBL	CA
600.500	-.109	-.08288	.04272	-.23806	.14857	-.04211	.18643
600.390	49.718	-.05566	.02499	-.25254	.15436	-.04315	.18593
600.420	99.823	-.02923	.00932	-.26199	.15666	-.04223	.18665
600.310	149.850	.00910	-.01111	-.26935	.16215	-.04086	.18915
600.410	199.800	.04766	-.03181	-.27933	.16745	-.03874	.19307
600.440	299.840	.11170	-.07085	-.28492	.17164	-.03494	.19572
600.480	399.850	.17991	-.11430	-.27890	.16028	-.02715	.18658
600.610	600.690	.25345	-.17148	-.19577	.12144	-.02131	.17991
600.500	799.910	.19594	-.14419	-.10287	.07014	-.02490	.16381
600.410	999.810	.05523	-.07515	-.02191	.01643	-.01112	.15919

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 OF POOR QUALITY

DATE 02 AUG 75

IA13 SOURCE DATA

(RTJ108) ( 31 JUL 75 )

IA13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 334/ 0 RN/L = 1.77

X	Z	CN	CLM	CY	CYN	CBL	CA
900.490	.331	-.03237	.01004	-.22279	.16892	-.05215	.18096
900.720	50.213	.01334	-.01927	-.24395	.18596	-.05139	.18503
900.610	100.270	.07208	-.05813	-.22931	.17515	-.04708	.18335
900.640	150.200	.13340	-.10073	-.21939	.16005	-.04200	.18204
900.720	200.160	.19354	-.14441	-.21622	.16270	-.04641	.18053
900.760	299.810	.24039	-.18592	-.21562	.15301	-.04389	.17047
900.700	399.610	.26493	-.20321	-.18880	.13461	-.04012	.16226
900.750	599.560	.17160	-.14022	-.09306	.06841	-.02200	.15123
900.630	800.060	-.02340	.00668	-.00986	.00788	.00103	.15280
900.730	999.760	-.05809	.03179	.00472	-.00291	.00068	.16850

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 430.000 PCMR = 1500.000

IA13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ109) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 335/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
-.871	799.770	.12143	-.09208	-.12769	.08372	-.02032	.18140

RUN NO. 336/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
300.490	799.700	.03304	-.03923	-.05024	.03803	-.01514	.16593

RUN NO. 337/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
800.950	800.110	-.05811	.03149	.00398	-.00247	.00049	.18718

RUN NO. 338/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
900.530	799.870	-.05835	.03136	.00403	-.00258	.00058	.16753

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 800.000 PCMR = 1500.000

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ110) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2990.0000 SQ. FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y .000 PCMBR = 1500.000

RUN NO. 339/ 0 RN/L = 3.49

X	Z	CN	CLM	CY	CYN	CBL	CA
.194	.084	-.00293	-.04682	-.07530	.00098	-.00469	.10060
.263	50.012	-.01258	-.04877	-.08826	.00400	.00400	.10540
.372	100.070	-.01904	-.02605	-.13742	-.04350	.00887	.13567
.403	150.240	.01394	-.00527	-.17343	-.04911	.00985	.14007
.355	201.220	.05634	.00480	-.18017	-.04598	.00731	.13848
.173	300.120	.08589	.03487	-.14310	-.03770	.00370	.14701
-.138	400.670	.10573	.03881	-.11086	-.02543	.00139	.15629
.093	599.810	.08406	.00628	-.04442	-.00052	-.00105	.15274
.208	802.500	.14287	-.06012	-.01369	-.00124	.00319	.17565
-.594	999.610	.04676	-.02326	-.00270	-.00018	.00016	.17007

RUN NO. 340/ 0 RN/L = 3.49

X	Z	CN	CLM	CY	CYN	CBL	CA
300.340	.173	.00098	.00550	-.10178	.00169	-.00834	.13186
300.300	49.824	-.07543	.02405	-.16981	.00401	-.00757	.15766
300.330	99.405	-.09721	.03495	-.20937	.00808	-.00521	.15837
300.400	152.170	-.04608	.03325	-.21728	.00547	.00140	.15198
300.270	201.940	.01354	.02129	-.18828	-.00147	.00414	.14748
300.250	299.840	.08120	.01754	-.13459	.00242	.00027	.14283
300.230	399.600	.07022	.01325	-.08710	.00248	-.00013	.14733
300.630	599.970	.11677	-.03631	-.04803	.01268	-.00128	.16305
300.580	800.000	.14685	-.09100	-.01790	.00705	-.00139	.17259
300.550	999.150	.01503	-.01312	-.00383	.00169	.00099	.16819

RUN NO. 341/ 0 RN/L = 3.49

X	Z	CN	CLM	CY	CYN	CBL	CA
600.510	.097	.05269	-.01743	-.10665	.02688	-.01777	.13923
600.580	52.503	.02152	-.00131	-.14515	.03354	-.01169	.15753
600.480	100.200	-.04170	.02101	-.22752	.06510	-.01028	.14964
600.560	149.150	-.02804	.01620	-.23508	.07212	-.00615	.14683
600.480	199.350	-.00119	.00980	-.21675	.07019	-.00531	.14673
600.550	300.080	.05703	-.01049	-.14767	.04306	-.00325	.14669
600.280	399.810	.07729	-.01873	-.10884	.03691	-.00391	.15040
600.520	602.330	.18324	-.10467	-.05565	.02731	-.00175	.17897
600.520	800.880	.04367	-.03099	-.01495	.00892	.00099	.16179
600.510	999.600	-.04208	.02023	.00159	-.00143	.00093	.16313

IA13.SRB(SB)WITH PLUMES SEPARATING FROM ORT10

(RTJ110) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 342/ 0 RN/L = 3.49

X	Z	CM	CLM	CY	CYN	CBK	CA
900.690	-.104	.15331	-.09074	-.10907	.05199	-.02870	.15783
900.600	51.358	.16096	-.07873	-.17211	.08952	-.02847	.16587
900.560	97.661	.09637	-.06998	-.18817	.10041	-.02743	.15823
900.660	149.680	.09879	-.05746	-.24783	.14142	-.02016	.16873
900.670	200.260	.09500	-.05637	-.24442	.14190	-.01690	.16144
900.580	300.300	.12878	-.05988	-.17052	.10233	-.01516	.16694
900.610	401.840	.15048	-.08280	-.12280	.07358	-.01258	.17187
900.550	600.220	.20544	-.15093	-.04744	.03310	-.00253	.16781
900.630	797.720	-.02212	.00502	-.00130	.00075	.00106	.15351
900.560	999.740	-.05693	.03246	.00325	-.00249	.00083	.16707

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = .000 PCMR = 1500.000

IA13.SRB(SB)WITH PLUMES SEPARATING FROM ORT10

(RTJ111) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 346/ 0 RN/L = 3.47

X	Z	CM	CLM	CY	CYN	CBK	CA
.151	-1.118	-.11034	.03931	-.10457	-.01103	-.00639	.17270
.152	50.697	-.09245	.03457	-.13167	-.00623	-.01092	.17069
.117	100.990	-.07364	.03186	-.15216	-.00306	-.01355	.16417
.186	150.970	-.05444	.03136	-.16484	.00344	-.01452	.15938
.239	201.050	-.03237	.02739	-.17029	.00728	-.01336	.15272
.247	300.140	-.02237	.02273	-.17947	.00288	-.01003	.16185
.294	401.890	.01229	.02233	-.18287	.01242	-.01049	.16934
.348	599.970	.10673	-.02624	-.12705	.03063	-.00700	.17310
.415	799.850	.15073	-.08109	-.07840	.03112	-.00703	.17129
.219	998.050	.04328	-.02558	-.03281	.01742	-.00024	.17010

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 200.000 PCMR = 1500.000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM OST10

(RTJ111) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREI = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 200.000 PCMPBR = 1500.000

RUN NO. 345/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN	CBL	CA
300.440	-1.417	-.09348	.03587	-.14273	.01851	-.01848	.15350
300.390	47.925	-.07648	.03615	-.15897	.03170	-.01878	.15778
300.360	98.430	-.03705	.03283	-.16488	.04375	-.02171	.15974
300.210	149.970	.00147	.02513	-.19148	.04463	-.02590	.15697
300.220	201.510	.01548	.01477	-.20667	.04609	-.02471	.15872
300.270	299.970	.01958	-.00407	-.22315	.05012	-.01873	.16286
300.240	400.060	.07772	-.02717	-.18527	.05226	-.01343	.16541
300.320	601.270	.15917	-.08845	-.12183	.05117	-.00939	.16828
300.420	801.320	.11186	-.07410	-.06236	.03481	-.00954	.16982
300.410	999.880	-.00436	-.00395	-.01714	.01170	.00157	.16601

RUN NO. 344/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN	CBL	CA
600.370	.05C	-.05109	.01934	-.15234	.06687	-.02857	.15509
600.400	50.624	-.03378	.01361	-.15725	.07277	-.02913	.5667
600.490	100.550	-.01295	.00512	-.16385	.07879	-.02637	.15973
600.510	151.720	.02947	-.00890	-.14385	.07399	-.01894	.15157
600.510	200.510	.08139	-.02448	-.15248	.07170	-.01771	.16409
600.470	299.980	.08085	-.03674	-.20599	.08111	-.02299	.16949
600.640	399.930	.18453	-.10513	-.19744	.09426	-.02112	.17539
600.620	599.960	.18491	-.13032	-.13276	.06330	-.01700	.17240
500.620	799.470	.02750	-.02655	-.03680	.02526	.00079	.16435
600.500	999.390	-.05764	.03155	.00323	-.00238	.00087	.16766

RUN NO. 343/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN	CBL	CA
900.570	-.656	.02537	-.02952	-.13991	.09626	-.02740	.17103
900.650	43.147	.09560	-.07379	-.13932	.09486	-.02541	.17358
900.620	99.350	.13927	-.10122	-.13909	.09457	-.02689	.17488
900.690	153.670	.17528	-.12548	-.14738	.10568	-.03191	.17476
900.450	199.760	.19426	-.14633	-.16127	.10145	-.03755	.16727
900.620	299.970	.21089	-.15302	-.16020	.10253	-.02849	.16307
800.690	400.990	.23260	-.16889	-.15370	.10169	-.01895	.16836
900.740	600.450	.05858	-.05210	-.05646	.04087	-.00371	.15543
900.680	799.990	-.05516	.02971	.00355	-.00269	.00091	.16334
900.580	999.770	-.05906	.03229	.00325	-.00249	.00082	.16777

1A13.SRB(58)WITH PLUMES SEPARATING FROM 09T10

(RTJ112) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCMPBR = 1500.000

RUN NO. 347/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN	CBL	CA
.197	-.133	-.09877	.04289	-.12832	.02763	-.01259	.18185
.133	49.754	-.09999	.04488	-.14323	.03175	-.01407	.17994
.262	99.855	-.09640	.04359	-.15524	.03551	-.01590	.17876
.103	148.590	-.08562	.03782	-.16498	.04155	-.01778	.17641
.211	198.930	-.07209	.03230	-.16924	.04693	-.01866	.17379
.195	299.000	-.03932	.02064	-.17299	.05762	-.01846	.17300
.091	398.860	-.00228	.00680	-.18230	.06601	-.01742	.17520
.269	600.980	.08562	-.04215	-.15311	.06408	-.01187	.17781
.279	800.760	.12703	-.08304	-.09068	.04837	-.01777	.17758
.445	999.230	.00319	-.00659	-.03625	.02317	.00156	.16835

RUN NO. 348/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN	CBL	CA
300.430	.077	-.09001	.04816	-.15774	.08815	-.02160	.17843
300.320	50.075	-.07416	.03689	-.17111	.09583	-.02505	.17585
300.280	100.180	-.05838	.02718	-.18074	.10035	-.02661	.17538
300.350	150.470	-.04222	.01903	-.18870	.10474	-.02754	.17767
300.310	200.280	-.02050	.00784	-.19120	.10638	-.02769	.17970
300.340	300.520	.01642	-.01289	-.18907	.10490	-.02421	.18062
300.420	400.430	.05219	-.03400	-.17853	.09635	-.01834	.18224
300.320	600.220	.13097	-.09091	-.12463	.07159	-.01971	.17934
300.450	799.170	.04566	-.04020	-.05989	.03814	-.00506	.16608
300.430	999.410	-.04539	.02297	-.00365	.00256	.00103	.16560

RUN NO. 349/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN	CBL	CA
500.450	-.039	-.08039	.04944	-.19094	.14937	-.03672	.18351
600.410	49.914	-.05598	.03106	-.18700	.14113	-.03285	.18296
600.470	99.871	-.03462	.01537	-.18224	.13223	-.02941	.18321
600.490	149.800	.00010	-.00754	-.17504	.12438	-.02664	.18424
600.480	200.120	.03808	-.03313	-.16332	.11426	-.02386	.18442
600.540	300.040	.09179	-.07255	-.14301	.09599	-.02053	.18053
600.530	399.940	.12529	-.09838	-.13058	.08613	-.02374	.17669
600.620	600.000	.08451	-.07567	-.07882	.05413	-.01768	.16432
600.430	800.430	-.04114	.01961	-.00815	.00598	.00123	.16110
600.520	999.900	-.05941	.03306	.00310	-.00241	.00078	.16928

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ112) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCHMR = 1500.000

RUN NO. 350/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN	CA
900.620	.040	-.05657	.03251	-.11379	.10059	.17267
900.640	50.220	-.01243	.00047	-.11253	.09637	.17418
900.650	100.530	.05091	-.04550	-.10425	.08604	.17667
900.740	150.330	.10166	-.08461	-.08563	.06881	.17277
900.660	200.140	.12419	-.10462	-.07472	.05710	.17274
900.710	299.040	.13312	-.11757	-.07531	.05540	.16390
900.760	399.360	.08547	-.08388	-.06780	.05024	.15602
900.560	599.870	-.05493	.02896	.00120	-.00095	.15979
900.600	800.050	-.05914	.03248	.00322	-.00247	.16583
900.730	999.760	-.05935	.03203	.00323	-.00242	.16978

1A13.SRB(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ113) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 800.000 PCHMR = 1500.000

RUN NO. 351/ 0 RN/L = 3.48

X	Z	CN	CLM	CY	CYN	CA
-.736	799.500	-.05059	.02620	-.00187	.00136	.16787

RUN NO. 352/ 0 RN/L = 3.48

X	Z	CN	CLM	CY	CYN	CA
300.410	799.870	-.05891	.03258	.00308	-.00234	.16847

RUN NO. 353/ 0 RN/L = 3.48

X	Z	CN	CLM	CY	CYN	CA
600.520	799.990	-.05888	.03293	.00312	-.00237	.17053

RUN NO. 354/ 0 RN/L = 3.48

X	Z	CN	CLM	CY	CYN	CA
900.620	799.900	-.05868	.03315	.00301	-.00237	.17232

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DATE 02 AUG 75

1A13 SOURCE DATA

(RTJ114) ( 31 JUL 75 )

1A13,SRB(SB)WITH PLUMES SEPARATING FROM ORBIT

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DRETA = .000  
Y = .000 PCMBR = 1500.000

RUN NO. 355/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.219	.056	-.03910	-.00882	-.06727	.00296	-.00525	.12220
.189	49.824	-.04243	-.00900	-.05888	-.01133	-.00062	.11932
.320	99.952	-.04716	-.00680	-.07391	-.02015	.00269	.12733
.459	150.500	-.05159	.02093	-.09175	-.02986	.00398	.15277
.071	163.410	-.02033	.02708	-.11692	-.03043	.00132	.15721
-.093	300.400	.02083	.03225	-.10624	-.02537	-.00054	.15882
-.107	400.960	.03506	.03246	-.08639	-.00586	-.00162	.15862
.089	599.780	.07099	-.01704	-.02572	.00227	.00035	.16781
.201	799.790	.01708	-.00155	-.00882	.00242	-.00012	.17262
-.549	999.240	-.02626	.00845	-.00058	-.00006	.00078	.17029

RUN NO. 356/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
300.320	-.014	-.04808	.02450	-.09337	.00196	-.01188	.15844
300.430	49.761	-.09050	.02978	-.12463	.00260	-.01009	.16082
300.300	99.398	-.09932	.03732	-.12453	-.00030	-.00397	.15896
300.290	151.920	-.06945	.03617	-.11365	-.00599	.00114	.15869
300.280	202.430	-.03485	.03022	-.12343	.00153	-.00150	.15536
300.250	298.950	-.00042	.02558	-.09491	.00349	-.00287	.15547
300.290	398.970	.02290	.01816	-.08317	.01267	-.00232	.15844
301.000	600.170	.09238	-.04937	-.03390	.01356	-.00034	.17836
300.390	797.160	.00204	-.00402	-.00702	.00352	.00087	.17143
300.580	997.570	-.05918	.02914	.00123	-.00148	.00051	.16975

RUN NO. 357/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
600.470	1.429	-.01748	.01305	-.05488	.00378	-.00811	.15151
600.290	50.297	-.02241	.01193	-.08890	.01758	-.00988	.15382
600.470	100.980	-.05110	.02444	-.14300	.04109	-.00894	.15310
600.540	149.060	-.05021	.02732	-.14266	.04381	-.00541	.15374
600.540	200.020	-.02121	.01786	-.13963	.04491	-.00577	.15629
600.590	300.480	.01771	.00608	-.10768	.00362	-.00587	.16099
600.260	399.580	.04858	-.00955	-.08144	.02900	-.00167	.16697
600.430	603.450	.08164	-.04192	-.02785	.01509	-.00133	.17108
600.510	800.730	-.03434	.01143	-.00236	.00109	.00071	.16699
600.530	1000.100	-.08480	.03313	.00143	-.00169	.00049	.17114

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,SRB1581WITH PLUMES SEPARATING FROM 09T10 (RTJ115) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LRLF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 358/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
.136	-1.417	-.04478	-.00604	-.08887	.00325	-.00556	.12394
.167	51.452	-.04513	-.00500	-.05853	-.01149	-.00061	.11911
.271	100.170	-.05339	.00002	-.06729	-.01995	.00215	.12750
.331	150.640	-.04858	.01731	-.08399	-.02819	.00370	.14784
.153	199.390	-.02281	.02734	-.11444	-.03049	.00134	.15762
-.125	300.130	.01730	.03903	-.10575	-.02541	-.00072	.15974
-.184	400.760	.03281	.03141	-.08677	-.00492	-.00206	.15869
.157	599.760	.07045	-.01737	-.02732	.00268	.00024	.16766
.217	799.910	.01604	-.00150	-.01012	.00301	-.00012	.17238
-.598	999.290	-.02595	.00859	-.00118	.00021	.00077	.16998

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 5.000 PC-MBR = 1500.000

RUN NO. 359/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
300.320	.029	-.04642	.02481	-.08217	.00147	-.01204	.15854
300.350	49.743	-.08890	.02945	-.12137	.00179	-.01037	.16076
300.540	98.850	-.10178	.03789	-.11849	-.00133	-.00449	.15947
300.370	158.100	-.07119	.03613	-.11009	-.00720	.00125	.15458
300.280	202.570	-.03738	.03040	-.12289	.00111	-.00181	.15584
300.170	299.060	-.00197	.02543	-.09575	.00307	-.00288	.15578
300.270	398.900	.02240	.01790	-.08491	.01320	-.00256	.15895
301.040	600.220	.09079	-.04887	-.03563	.01463	-.00072	.17816
300.460	797.190	.00149	-.00482	-.00857	.00393	.00090	.17143
300.550	997.650	-.05934	.02927	.00112	-.00145	.00051	.16955

RUN NO. 360/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
600.380	.835	-.01989	.01382	-.04750	.00238	-.00733	.15075
600.320	50.167	-.02146	.01265	-.08665	.01757	-.01035	.15352
600.480	100.860	-.05117	.02428	-.13966	.03079	-.00899	.15315
600.570	148.220	-.05202	.02785	-.14074	.04197	-.00536	.15373
600.460	199.970	-.02327	.01797	-.13826	.04299	-.00571	.15628
600.610	300.410	.01695	.00585	-.10268	.03555	-.00594	.16099
600.190	399.640	.04953	-.00983	-.08369	.03010	-.00209	.16631
600.440	603.270	.05858	-.03997	-.03011	.01651	-.00144	.17101
600.480	800.620	-.03452	.01160	-.00255	.00122	.00071	.16889
600.520	1000.100	-.06462	.03311	.00140	-.00167	.00049	.17104

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IA13,SRB(SB)WITH PLUMES SEPARATING FROM OSTIO

(RTJ116) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMAX = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = -47.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DELTA = .000 DBETA = .000  
 Y = 10.000 PCMBR = 1500.000

RUN NO. 361/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.176	-1.013	-.04815	-.00097	-.07183	.00304	-.00592	.12815
.170	51.051	-.04194	-.00071	-.05605	-.01152	-.00095	.11764
.242	100.270	-.05471	.00717	-.06103	-.01911	.00139	.12728
.486	151.030	-.04635	.01719	-.07847	-.02655	.00320	.14383
.095	199.470	-.02579	.02827	-.11013	-.03035	.00136	.15853
-.113	300.300	.01434	.03705	-.10821	-.02501	-.00105	.16113
-.061	400.560	.03017	.02985	-.08839	-.00366	-.00281	.15931
.218	599.850	.07171	-.01857	-.03003	.00349	-.00004	.16759
.129	799.870	.01670	-.00190	-.01128	.00352	-.00018	.17203
-.554	999.160	-.02716	.00882	-.00147	.00037	.00079	.17015

RUN NO. 362/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.400	.003	-.05044	.02537	-.09159	.00057	-.01260	.15887
300.390	49.976	-.08520	.02909	-.11745	.00048	-.01124	.16083
300.350	98.430	-.10374	.03818	-.11702	-.00125	-.00009	.16103
300.410	151.920	-.07496	.03628	-.10619	-.00732	.00073	.16052
300.360	199.770	-.04253	.03109	-.11995	-.00013	-.00171	.15666
300.160	298.840	-.00377	.02507	-.03735	.00245	-.00298	.15606
300.190	399.090	.02354	.01655	-.08965	.01515	-.00302	.15916
300.830	400.260	.09017	-.04897	-.03740	.01554	-.00132	.17809
300.470	797.020	.00106	-.00476	-.00924	.00432	.00090	.17146
300.450	997.770	-.05985	.02975	.00099	-.00145	.00050	.16984

RUN NO. 363/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.440	.422	-.02210	.01488	-.04314	.00029	-.00691	.15042
600.490	50.036	-.01690	.01220	-.08521	.01773	-.01093	.15214
600.440	101.000	-.04649	.02308	-.13454	.03569	-.00995	.15347
600.480	149.130	-.05280	.02804	-.13760	.03974	-.00570	.15433
600.600	200.050	-.02582	.01830	-.13417	.03936	-.00534	.15635
600.650	300.440	.01702	.00466	-.10931	.03491	-.00550	.16087
600.280	399.800	.04973	-.01089	-.08654	.03186	-.00255	.16635
600.560	603.050	.05537	-.03796	-.03183	.01757	-.00145	.17090
600.530	800.780	-.03552	.01231	-.00270	.00128	.00071	.16686
600.620	1000.300	-.06433	.03299	.00128	-.00166	.00047	.17131

DATE 02 AUG 75 1A13 SOURCE DATA

1A13, SRB(SB) WITH PLUMES SEPARATING FROM 09T10

(RTJ1116) (31 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 364/ 0 RN/L = 6.62

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 10.000 PCH#BR = 1500.000

X	Z	CN	CLM	CY	CYN	CBL	CA
900.920	.079	.04009	-.03411	-.06068	.02687	-.01986	.16142
900.610	50.560	.05181	-.04177	-.09818	.04693	-.02077	.15933
900.670	98.537	.06048	-.04643	-.11710	.05612	-.02000	.16068
900.800	149.010	.07030	-.05097	-.12755	.06977	-.01420	.16371
900.730	199.250	.07109	-.04697	-.15106	.09150	-.01533	.17285
900.540	299.690	.12052	-.07807	-.11553	.06822	-.01013	.17429
900.570	402.700	.15358	-.10288	-.07328	.04897	-.00888	.17681
900.560	596.980	.00546	-.01499	-.01823	.01290	-.00184	.16508
900.580	797.000	-.06618	.03355	-.00107	-.00131	.00081	.16953
900.650	999.730	-.06607	.03373	.00093	-.00126	.00079	.17298

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 368/ 0 RN/L = 6.62

1A13, SRB(SB) WITH PLUMES SEPARATING FROM 09T10

(RTJ1117) (31 JUL 75)

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 200.000 PCH#BR = 1500.000

X	Z	CN	CLM	CY	CYN	CBL	CA
.126	-.158	-.09809	.03627	-.09401	-.00016	-.00886	.17159
.226	51.014	-.08795	.03447	-.10267	.00260	-.01092	.16695
.249	101.120	-.07606	.03309	-.10739	.00627	-.01105	.16468
.218	150.790	-.06403	.03080	-.11155	.01291	-.01101	.16398
.316	210.500	-.05585	.02941	-.11817	.01608	-.01033	.16315
.187	301.150	-.03314	.02328	-.12547	.01870	-.00900	.16730
.308	401.400	.00423	.00750	-.11496	.02065	-.00613	.16904
.417	600.060	.05358	-.02696	-.08449	.02781	-.00767	.17248
.271	799.950	.00769	-.00690	-.03541	.01699	-.00003	.17227
.261	997.990	-.04281	.01729	-.00695	.00431	.00111	.17004

IA13,SRB(SB)WITH PLUKES SEPARATING FROM ORBIT

(RTJ117) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 200.000 PCMBR = 1500.000

RUN NO. 367/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.420	- .546	-.08436	.03640	-.11963	.03496	-.01577	.16327
300.300	48.383	-.08075	.03516	-.12939	.03819	-.01688	.16368
300.320	98.897	-.06828	.02910	-.13203	.04062	-.01635	.16527
300.410	148.330	-.04195	.01725	-.12270	.04165	-.01535	.16638
300.280	198.780	-.01463	.00676	-.11499	.04176	-.01308	.16754
300.330	299.960	.01987	-.01204	-.12579	.04189	-.01011	.16846
300.200	399.910	.04379	-.02606	-.11760	.04503	-.00911	.16887
300.400	601.340	.05926	-.04552	-.06449	.03225	-.01048	.17406
300.490	800.960	-.02165	.00443	-.02225	.01435	.00177	.17037
300.470	999.840	-.08613	.03383	.00078	-.00117	.00077	.17150

RUN NO. 366/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.530	.012	-.05867	.02256	-.12185	.06782	-.02023	.16685
600.540	50.472	-.04569	.01664	-.12332	.06939	-.01983	.16836
600.550	100.770	-.02446	.00652	-.12531	.07117	-.01930	.17066
600.640	150.630	.00573	-.01033	-.12296	.07070	-.01857	.17507
600.550	200.260	.02849	-.02483	-.12005	.07042	-.01796	.17660
600.550	299.900	.07714	-.05731	-.11292	.08222	-.01351	.17856
600.610	400.960	.10680	-.08042	-.10665	.06049	-.01705	.17844
600.630	599.870	-.00591	-.00702	-.04410	.02914	.00144	.16969
600.640	799.400	-.06160	.03037	-.00060	.00000	.00088	.16864
600.540	998.990	-.06631	.03390	.00394	-.00125	.00078	.17257

RUN NO. 365/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.650	-.412	.01192	-.01837	-.10918	.08666	-.01570	.18171
900.590	43.862	.04961	-.04569	-.08820	.06893	-.01563	.18018
900.590	99.759	.08589	-.07459	-.08067	.06042	-.01945	.17906
900.520	151.030	.11728	-.09977	-.09256	.06587	-.02580	.17723
900.670	201.280	.13581	-.11636	-.08742	.06058	-.02675	.17503
900.760	300.050	.11180	-.10329	-.09503	.06586	-.02608	.17317
900.840	400.070	.03850	-.04973	-.06999	.04953	-.00824	.16523
900.710	600.660	-.05166	.02201	-.00620	.00427	.00116	.16164
900.650	800.460	-.06613	.03332	.00083	-.03122	.00078	.17018
900.780	999.710	-.06508	.03377	.00089	-.00124	.00078	.17320

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1413 SOURCE DATA

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1413, SRB(SB) WITH PLUGS SEPARATING FROM ORBIT

(RTJ118) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XRRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZRRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCHMBR = 1500.000

RUN NO. 369/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.232	-350	-.08458	.04128	-.10735	.04964	-.01282	.17970
.280	49.571	-.07661	.03660	-.11423	.05357	-.01353	.17955
.233	99.660	-.06901	.03255	-.12082	.05748	-.01472	.17937
.177	149.560	-.06120	.02875	-.12694	.06153	-.01601	.17946
.172	199.150	-.05134	.02381	-.13034	.06462	-.01672	.17913
.220	299.510	-.02779	.01105	-.12336	.06019	-.01340	.18021
.212	399.870	-.00185	-.00410	-.11135	.05448	-.01071	.18126
.321	800.430	.04185	-.03789	-.07271	.03913	-.01158	.17783
.262	800.170	-.03310	.01215	-.02952	.01874	.00180	.17089
.291	999.810	-.06548	.03332	.00037	-.00097	.00074	.17155

RUN NO. 370/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.520	-.122	-.08894	.05094	-.12423	.09328	-.02211	.18159
300.340	50.208	-.07628	.04094	-.12432	.09159	-.02046	.18107
300.370	100.170	-.06300	.03109	-.11742	.08352	-.01640	.18146
300.300	150.180	-.04781	.02067	-.11215	.07726	-.01348	.18225
300.290	200.190	-.03126	.00945	-.10636	.07097	-.01121	.18238
300.470	300.370	.00040	-.01253	-.09574	.06170	-.01025	.18188
300.290	399.810	.02047	-.03304	-.08158	.05104	-.01147	.17976
300.390	599.760	-.00565	-.01295	-.04661	.03065	-.00523	.16956
300.440	799.880	-.05981	.02904	-.00426	.00246	.00090	.16939
300.400	999.540	-.06629	.03387	.00031	-.00105	.00068	.17245

RUN NO. 371/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.460	-.230	-.05914	.03690	-.06753	.05706	-.00945	.17536
600.550	49.796	-.05680	.02746	-.07096	.05889	-.00973	.17661
600.560	99.851	-.04071	.01528	-.07220	.05879	-.00977	.17733
600.470	150.090	-.02168	.00076	-.06992	.05509	-.01024	.17737
600.560	200.430	-.00243	-.01454	-.06108	.04719	-.01045	.17573
600.450	300.240	.02183	-.03535	-.05563	.04158	-.01500	.17366
600.650	400.080	.00534	-.02884	-.04386	.03279	-.01415	.16877
600.410	600.320	-.06119	.03068	-.00417	.00243	.00088	.16722
600.630	800.370	-.08811	.03353	.00028	-.00104	.00068	.17055
670.550	999.880	-.06593	.03381	.00030	-.00104	.00068	.17281

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ118) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCMPR = 1500.000

RUN NO. 372/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.620	-0.098	-0.01569	-0.01762	-0.01397	-0.01291	-0.00721	.17213
900.750	50.214	-0.02216	-0.00123	-0.01249	.01100	-0.01165	.17244
900.660	100.050	.00364	-0.02246	-0.01374	.01191	-0.01798	.17215
900.710	150.000	.02093	-0.03730	-0.01414	.01213	-0.02240	.17025
900.700	199.900	.02297	-0.04067	-0.01298	.01096	-0.02355	.16810
900.750	300.390	-0.02315	-0.00508	-0.00414	.00252	-0.01189	.16508
900.620	399.820	-0.06572	.03307	.00053	-0.00129	.00059	.16801
900.830	599.640	-0.06500	.03299	.00029	-0.00108	.00067	.16922
900.760	799.750	-0.06023	.03365	.00039	-0.00110	.00007	.17209
900.760	999.340	-0.06606	.03361	.00037	-0.00108	.00067	.17307

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ119) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 800.000 PCMPR = 1500.000

RUN NO. 373/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
-1.684	799.950	-0.06595	.03358	.00025	-0.00105	.00066	.17298

RUN NO. 374/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.440	799.990	-0.06583	.03353	.00028	-0.00108	.00067	.17310

RUN NO. 375/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.580	799.870	-0.06582	.03352	.00027	-0.00105	.00068	.17304

RUN NO. 376/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.880	799.860	-0.06590	.03355	.00029	-0.00105	.00066	.17312

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1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUKES SEPARATING FROM ORTIO

(RTJ120) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1053.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = .000 PCMPBR = .000

PARAMETRIC DATA

RUN NO. 377/ 0 RN/L = 6.83

X	Z	CN	CLM	CY	CYN	CBL	CA
.253	.264	-.06511	.03225	-.01587	-.00141	-.00049	.17291
.172	50.206	-.06591	.03451	-.01408	-.00152	.00019	.17308
.217	99.783	-.06170	.03269	-.01319	-.00119	-.00025	.17312
.134	149.020	-.05818	.03131	-.01329	-.00071	-.00065	.17362
.243	197.520	-.05322	.02946	-.01467	.00038	-.00119	.17397
.167	299.900	-.04526	.02476	-.01328	.00202	-.00125	.17330
.238	400.860	-.05522	.02776	-.00616	.00249	.00097	.17194
.255	600.930	-.06588	.03341	.00024	-.00103	.00067	.17219
.318	800.240	-.06574	.03337	.00032	-.00108	.00067	.17232
.280	1000.100	-.06588	.03343	.00035	-.00109	.00067	.17255

RUN NO. 378/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.420	.554	-.06164	.02932	-.01876	.00409	-.00105	.17354
300.460	49.787	-.05940	.02918	-.01635	.00343	-.00075	.17342
300.440	99.707	-.05504	.02728	-.01436	.00335	-.00096	.17409
300.520	149.810	-.05135	.02474	-.01182	.00277	-.00133	.17301
300.440	199.910	-.05537	.02806	-.00985	.00231	.00009	.17249
300.460	300.360	-.05637	.02964	-.00830	.00265	.00098	.17246
300.510	402.140	-.05420	.02651	-.00667	.00318	.00102	.17200
300.430	598.750	-.05592	.03349	-.00025	-.00107	.00067	.17243
300.450	799.060	-.06596	.03351	.00028	-.00108	.00068	.17255
300.450	999.300	-.06588	.03347	.00026	-.00107	.00067	.17250

RUN NO. 379/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.520	.705	-.04843	.02076	-.01749	.00701	-.00252	.17526
600.560	50.822	-.04822	.02021	-.01519	.00579	-.00233	.17325
600.490	100.360	-.05559	.02611	-.01289	.00515	-.00018	.17267
600.510	150.370	-.05907	.02950	-.01048	.00437	.00083	.17235
600.620	200.500	-.05993	.03024	-.00784	.00328	.00098	.17243
600.590	299.880	-.05949	.02901	-.00486	.00235	.00089	.17234
600.670	400.050	-.06340	.03134	-.00099	-.00008	.00074	.17196
600.530	501.060	-.06610	.03337	.00026	-.00107	.00067	.17273
600.690	800.840	-.06617	.03340	.00026	-.00106	.00066	.17286
600.600	1000.100	-.06607	.03336	.00026	-.00105	.00067	.17267

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1A13 SOURCE DATA

(RTJ120) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 380/ 0 RN/L = 6.63

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = .000 PCHMR = .000

X	Z	CN	CLM	CY	CYN	CBL	CA
900.740	-1.247	-.05599	.02443	-.01445	.00938	-.00084	.17264
900.740	49.679	-.06112	.02933	-.01359	.00794	.00068	.17237
900.810	99.936	-.06160	.03023	-.01144	.00674	.00102	.17264
900.670	149.640	-.06116	.02996	-.06844	.00498	.00103	.17227
900.770	199.690	-.06110	.02969	-.00548	.00317	.00092	.17211
900.720	299.690	-.06606	.03331	.00020	-.00102	.00067	.17221
900.750	399.950	-.06610	.03337	.00024	-.00105	.00066	.17251
900.660	501.980	-.06610	.03335	.00020	-.00104	.00066	.17252
900.730	799.350	-.06614	.03337	.00025	-.00106	.00067	.17259
900.710	999.080	-.06616	.03337	.00024	-.00106	.00067	.17259

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ121) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 384/ 0 RN/L = 6.62

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 200.000 PCHMR = .000

X	Z	CN	CLM	CY	CYN	CBL	CA
.318	-.262	-.05934	.02842	-.01852	.00999	-.00050	.17394
.236	50.081	-.05724	.02705	-.01685	.00865	-.00039	.17408
.184	100.240	-.05534	.02569	-.01500	.00765	-.00055	.17354
.273	150.240	-.05528	.02570	-.01301	.00688	-.00054	.17307
.278	200.220	-.05626	.02622	-.01006	.00530	-.00054	.17247
.189	300.060	-.06238	.03093	-.00505	.00240	.00088	.17226
.195	400.010	-.06433	.03210	-.00126	.00009	.00074	.17226
.281	599.560	-.06596	.03331	.00023	-.00105	.00067	.17244
.378	799.460	-.06599	.03330	.00022	-.00106	.00066	.17238
.269	999.900	-.06607	.03334	.00025	-.00106	.00066	.17255

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ121) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1092.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0060 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 200.000 PCHMR = .000

RUN NO. 383/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.450	-.154	-.05789	.02723	-.01726	.00877	-.00014	.17415
300.440	49.932	-.05340	.02412	-.0.685	.00956	-.00079	.17373
300.350	99.842	-.04965	.02121	-.01657	.00968	-.00177	.17357
300.340	149.580	-.05030	.02117	-.01425	.00831	-.00182	.17283
300.460	200.060	-.05907	.02831	-.01064	.00601	.00045	.17203
300.390	300.370	-.06415	.03188	-.00209	.00076	.00080	.17196
300.390	400.160	-.06610	.03335	.00023	-.00105	.00066	.17248
300.440	600.660	-.06591	.03326	.00031	-.00109	.00068	.17215
300.510	800.230	-.06603	.03332	.00021	-.00105	.00066	.17243
300.410	999.960	-.06598	.03331	.00028	-.00106	.00066	.17252

RUN NO. 382/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.480	.018	-.05797	.02690	-.00516	.00356	-.00122	.17311
600.640	50.037	-.05799	.02571	-.00489	.00300	-.00143	.17237
600.430	99.924	-.06378	.03138	-.00334	.00163	.00034	.17166
600.500	149.970	-.06519	.03264	-.00179	.00058	.00079	.17162
600.520	199.950	-.06562	.03299	-.00042	-.00052	.00071	.17175
600.560	300.580	-.06591	.03325	.00024	-.00105	.00067	.17184
600.520	401.130	-.06592	.03328	.00023	-.00105	.00066	.17216
600.570	599.250	-.06611	.03335	.00028	-.00107	.00067	.17256
600.580	799.310	-.06611	.03335	.00027	-.00106	.00066	.17261
600.600	999.420	-.06603	.03333	.00026	-.00106	.00067	.17252

RUN NO. 381/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.590	.102	-.06536	.03267	.00011	-.00101	.00041	.17196
900.650	50.082	-.06608	.03333	.00021	-.00106	.00067	.17225
900.680	100.150	-.06604	.03332	.00023	-.00106	.00067	.17213
900.680	150.240	-.06614	.03336	.00023	-.00106	.00067	.17250
900.660	200.220	-.06607	.03334	.00022	-.00108	.00067	.17246
900.690	299.650	-.06614	.03337	.00027	-.00107	.00067	.17258
900.650	398.890	-.06597	.03331	.00021	-.00106	.00067	.17241
900.770	600.740	-.06608	.03335	.00023	-.00106	.00066	.17263
900.730	800.710	-.06605	.03334	.00020	-.00105	.00066	.17256
900.630	999.690	-.06616	.03338	.00018	-.00105	.00067	.17263

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 400.000 PCHEBR = .000

REFERENCE DATA

SREF = 2800.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
PRRF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 385/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
248	-113	-06418	.03195	-00058	-00030	.00015	.17257
238	49.871	-06398	.03170	-00053	-00029	.00000	.17270
261	99.854	-06391	.03159	-00048	-00036	.00006	.17246
255	149.980	-06438	.03194	-00029	-00058	.00005	.17224
181	200.040	-06563	.03295	.00004	-00094	.00049	.17219
305	300.030	-06592	.03326	.00026	-00107	.00067	.17215
379	400.380	-06598	.03330	.00026	-00106	.00067	.17233
294	600.000	-06605	.03333	.00023	-00107	.00067	.17253
315	799.940	-06606	.03333	.00022	-00106	.00066	.17256
326	999.960	-06611	.03337	.00022	-00106	.00066	.17268

RUN NO. 386/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.390	.109	-06419	.03184	-00047	-00032	.00001	.17274
300.380	50.145	-06440	.03197	-00034	-00053	.00007	.17223
300.410	100.150	-06562	.03291	.00002	-00091	.00046	.17250
300.530	150.220	-06598	.03327	.00021	-00106	.00067	.17223
300.450	200.130	-06602	.03329	.00022	-00106	.00067	.17229
300.350	300.130	-06601	.03330	.00018	-00105	.00066	.17241
300.390	399.940	-06594	.03330	.00022	-00106	.00067	.17253
300.440	599.810	-06604	.03330	.00024	-00106	.00067	.17238
300.460	799.770	-06603	.03330	.00016	-00104	.00066	.17238
300.360	1000.000	-06594	.03326	.00018	-00105	.00066	.17225

RUN NO. 387/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.530	-227	-06544	.03282	-00004	-00086	.00044	.17239
600.510	49.966	-06602	.03331	.00017	-00104	.00066	.17242
600.520	100.010	-06604	.03332	.00017	-00105	.00066	.17247
600.510	149.950	-06603	.03331	.00021	-00105	.00066	.17245
600.170	199.890	-06601	.03330	.00020	-00105	.00067	.17235
600.500	299.860	-06604	.03331	.00021	-00105	.00066	.17241
600.530	399.980	-06595	.03327	.00018	-00105	.00066	.17222
600.460	600.420	-06586	.03325	.00017	-00105	.00066	.17224
600.530	800.030	-06604	.03332	.00022	-00106	.00067	.17246
600.460	999.990	-06594	.03327	.00018	-00106	.00068	.17227

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ122) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1059.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 388/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.670	.240	-.06601	.03331	.00020	-.00105	.00066	.17240
900.680	50.268	-.06600	.03329	.00017	-.00104	.00066	.17237
900.700	100.130	-.06605	.03331	.00019	-.00106	.00067	.17240
900.690	150.200	-.06596	.03327	.00022	-.00105	.00066	.17234
900.680	200.230	-.06502	.03330	.00018	-.00104	.00066	.17231
900.690	300.240	-.06502	.03331	.00018	-.00104	.00066	.17244
900.630	399.820	-.06603	.03330	.00022	-.00105	.00066	.17236
900.690	599.940	-.06605	.03330	.00020	-.00105	.00066	.17241
900.730	799.460	-.06605	.03331	.00020	-.00105	.00066	.17243
900.670	999.670	-.06610	.03333	.00018	-.00105	.00066	.17238

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCHMBR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1032.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 389/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.263	800.120	-.06602	.03329	.00018	-.00105	.00066	.17234

RUN NO. 390/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.380	800.030	-.06602	.03329	.00017	-.00104	.00066	.17236

RUN NO. 391/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
600.410	800.000	-.06595	.03327	.00018	-.00104	.00066	.17222

RUN NO. 392/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.760	799.900	-.06599	.03328	.00017	-.00104	.00066	.17225

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 800.000 PCHMBR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ123) ( 31 JUL 75 )

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SR8(S8) W/O PLUMES SEPARATING FROM OST10

(RTJ124) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YHRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZHRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 393/ 0 RN/L = 6.83

X	Z	CN	CLM	CY	CYN	CBL	CA
1601.100	800.170	-.06610	.03330	.00007	-.00103	.00065	.17191

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 800.000 PCMBR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YHRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZHRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 394/ 0 RN/L = 6.83

X	Z	CN	CLM	CY	CYN	CBL	CA
1600.200	-.055	-.06605	.03326	.00012	-.00104	.00065	.17175
1601.100	50.080	-.06608	.03328	.00013	-.00104	.00065	.17181
1601.100	99.953	-.06609	.03327	.00009	-.00102	.00064	.17181
1601.000	150.060	-.06597	.03322	.00011	-.00103	.00065	.17156
1600.900	199.970	-.06609	.03328	.00010	-.00101	.00065	.17182
1601.000	300.050	-.06608	.03326	.00011	-.00103	.00065	.17176
1601.100	398.940	-.06607	.03326	.00005	-.00101	.00064	.17176
1601.100	600.500	-.06608	.03328	.00011	-.00102	.00064	.17181
1601.000	800.420	-.06615	.03331	.00010	-.00103	.00065	.17207
1601.100	1000.200	-.06612	.03329	.00006	-.00102	.00065	.17185

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 400.000 PCMBR = .000

DATE 02 AUG 75 1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ126) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = .000  
Y = .000 PCHMR = .000

RUN NO. 395/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
.295	.245	-.06664	.03496	-.01072	-.00397	.00081	.17176
.228	50.233	-.06439	.03412	-.00783	-.00398	.00048	.17219
.184	99.965	-.06219	.03318	-.00699	-.00328	.00003	.17257
.289	149.330	-.05848	.03142	-.00812	-.00207	-.00060	.17308
.403	198.170	-.05355	.02895	-.00927	-.00086	-.00127	.17341
.215	300.010	-.05289	.02889	-.00921	.00091	.00013	.17209
.335	400.620	-.05969	.02977	-.00339	.00091	.00081	.17151
.201	600.030	-.06607	.03323	.00011	-.00103	.00065	.17141

RUN NO. 398/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
900.670	.303	-.06011	.02807	-.01281	.00718	.00026	.17151
900.660	50.049	-.06233	.03053	-.01151	.00642	.00093	.17192
900.750	100.190	-.06179	.03041	-.00901	.00501	.00099	.17162
900.630	150.000	-.06121	.02981	-.00671	.00377	.00093	.17151
900.960	200.400	-.06204	.03023	-.00394	.00191	.00081	.17118
900.610	300.610	-.06598	.03319	.00000	-.00100	.00064	.17097
900.820	398.350	-.06608	.03323	.00011	-.00103	.00065	.17140
900.530	600.260	-.06606	.03324	.00008	-.00101	.00064	.17165

DATE 02 AUG 75

1A13 SOURCE DATA

1A13 SRB(SB) H/O PLUMES SEPARATING FROM 09T10

(RTJ127) (31 JUL 75)

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
CALPHA = 5.000 DBETA = .000  
Y = 200.000 PCMBR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 396/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
.440	-2.101	-.05941	.02848	-.01724	.00874	-.00002	.17275
.220	50.356	-.05771	.02746	-.01494	.00722	.00008	.17261
.343	100.230	-.05718	.02717	-.01310	.00649	-.00003	.17240
.243	150.240	-.05641	.02633	-.01057	.00531	-.00044	.17209
.316	200.330	-.05921	.02839	-.00754	.00360	-.00005	.17139
.122	300.410	-.06290	.03106	-.00386	.00169	.00084	.17150
.228	400.230	-.06540	.03271	-.00048	-.00057	.00067	.17134
.400	599.430	-.06621	.03329	.00004	-.00102	.00064	.17181

RUN NO. 399/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
900.670	-868	-.06618	.03327	.00003	-.00102	.00065	.17125
900.650	49.955	-.06612	.03325	.00008	-.00102	.00064	.17131
900.550	99.868	-.06615	.03326	.00006	-.00101	.00064	.17144
900.620	149.840	-.06612	.03326	.00005	-.00101	.00064	.17148
900.840	199.770	-.06613	.03325	.00006	-.00101	.00063	.17144
900.810	299.530	-.06612	.03328	.00007	-.00101	.00064	.17168
900.760	400.070	-.06611	.03327	.00009	-.00101	.00064	.17167
900.490	601.200	-.06617	.03328	.00004	-.00101	.00064	.17165

DATE 02 AUG 75

1A13 SOURCE DATA

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1/13 SRB(SB) W/O PLUMES SEPARATING FROM C9T10

(RTJ128) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2680.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRKF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

1ACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = .000  
 Y = 400.000 PCMRBR = .000

RUN NO. 397/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
.303	-.087	-.05430	.03187	-.00057	-.00036	.00011	.17176
.378	49.864	-.06414	.03169	-.00058	-.00037	.00000	.17169
.282	99.887	-.06432	.03179	-.00048	-.00047	.00001	.17158
.288	149.690	-.06519	.03244	-.00021	-.00077	.00029	.17138
.39	199.850	-.06602	.03320	.00004	-.00100	.00064	.17126
.271	300.080	-.06607	.03322	.00005	-.00102	.00064	.17142
.240	400.110	-.06502	.03321	.00005	-.00101	.00064	.17140
.377	599.350	-.06617	.03328	.00005	-.00101	.00063	.17168

RUN NO. 400/ 0 RN/L = 8.64

X	Z	CN	CLM	CY	CYN	CBL	CA
900.580	-.146	-.06608	.03323	.00007	-.00102	.00064	.17157
900.650	49.892	-.06611	.03325	.00004	-.00101	.00063	.17153
900.690	99.888	-.06611	.03326	.00004	-.00101	.00064	.17159
900.680	149.930	-.06615	.03327	.00006	-.00102	.00064	.17162
900.680	199.570	-.06616	.03328	.00037	-.00102	.00064	.17169
900.610	300.010	-.06620	.03329	.00005	-.00102	.00064	.17178
900.760	399.600	-.06612	.03325	.00006	-.00102	.00064	.17150
900.660	599.290	-.06611	.03326	.00007	-.00102	.00064	.17159



1A13 SRB(58) W/O PLUMES SEPARATING FROM 09110

(RTJ129) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = .000 PCMMBR = .000

RUN NO. 411/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.343	51.258	-.05467	.02378	-.02345	.00314	-.00306	.17258
.293	99.585	-.05880	.02839	-.02411	.00346	-.00178	.17265
.244	148.710	-.05616	.02883	-.02481	.00389	-.00171	.17311
.288	200.140	-.05095	.02729	-.02469	.00370	-.00185	.17302
.224	299.940	-.03752	.02042	-.02209	.00568	-.00245	.17282
.338	401.960	-.05083	.02599	-.01175	.00491	.00110	.17134
.340	601.090	-.08508	.03238	-.00038	-.00070	.00065	.17090
.281	800.750	-.08827	.03328	.00000	-.00100	.00083	.17139
.275	1000.100	-.06811	.03320	.00000	-.00100	.00063	.17100

RUN NO. 409/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.360	.061	-.05012	.01896	-.02411	.00783	-.00392	.17372
300.390	50.384	-.05255	.02203	-.02392	.00746	-.00319	.17305
300.470	100.530	-.05358	.02443	-.02254	.00707	-.00213	.17324
300.420	150.480	-.05048	.02368	-.02043	.00686	-.00187	.17260
300.380	199.390	-.05003	.02399	-.01768	.00603	-.00102	.17164
300.370	300.150	-.05367	.02806	-.01272	.00455	.00093	.17080
300.490	401.510	-.05083	.02489	-.01023	.00482	.00108	.17086
300.400	601.160	-.05606	.03324	-.00001	-.00100	.00063	.17120
300.570	801.040	-.05601	.03324	.00001	-.00100	.00063	.17130
300.440	1000.000	-.05595	.03320	.00003	-.00101	.00063	.17101

RUN NO. 401/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.660	51.258	-.04099	.01454	-.02016	.00873	-.00407	.17308
600.760	100.700	-.05044	.02163	-.01853	.00824	-.00150	.17168
600.610	150.400	-.05616	.02700	-.01601	.00735	.00040	.17110
600.680	200.030	-.05804	.02895	-.01263	.00621	.00106	.17113
600.510	299.940	-.05785	.02815	-.00741	.00369	.00094	.17091
600.650	400.140	-.05087	.02945	-.00275	.00111	.00079	.17067
600.770	601.730	-.05604	.03326	.00007	-.00102	.00064	.17144
600.830	801.140	-.05601	.03323	.00002	-.00101	.00064	.17142
600.700	999.970	-.05601	.03324	.00007	-.00102	.00064	.17137

(RTJ129) ( 31 JUL 75 )

1A13 SR8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ130) ( 31 JUL 75 )

REFERENCE DATA

SREF = 3600.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 402/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
800.460	48.262	-.05751	.02592	-.01879	.00987	-.00008	.17113
900.790	99.887	-.06063	.02928	-.01498	.00892	.00092	.17104
800.750	149.610	-.05056	.02958	-.01122	.00667	.00106	.17086
900.710	199.680	-.06020	.02909	-.00803	.00479	.00099	.17061
900.670	299.406	-.05462	.03215	-.00082	-.00030	.00068	.17054
900.680	400.100	-.06600	.03322	.00011	-.00103	.00064	.17100
900.770	599.770	-.05502	.03325	.00004	-.00101	.00063	.17140
900.700	799.310	-.06569	.03318	.00004	-.00101	.00064	.17106
900.610	998.740	-.06503	.03324	.00003	-.00101	.00064	.17130

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = .000  
Y = .000 PCMBR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 412/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.340	50.483	-.05544	.02534	-.02105	.01155	-.00145	.17384
.364	100.330	-.05211	.02304	-.01927	.01015	-.00139	.17321
.246	150.110	-.05030	.02161	-.01801	.00977	-.00174	.17283
.350	200.040	-.05240	.02312	-.01513	.00832	-.00125	.17192
.344	300.110	-.06152	.03027	-.00753	.00379	.00087	.17068
.331	399.610	-.06357	.03129	-.00289	.00113	.00078	.17113
.187	599.170	-.06332	.03330	-.00006	-.00099	.00062	.17131
.253	799.260	-.06625	.03327	-.00005	-.00098	.00052	.17115
.380	999.660	-.05616	.03324	-.00002	-.00098	.00052	.17108

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = .000  
Y = 200.000 PCMBR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ130) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2650.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.00 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 200.000 PCMRB = .000

RUN NO. 403/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.400	-1.297	-.05613	.02576	-.02044	.01233	-.00139	.17354
300.250	49.714	-.05270	.02345	-.01852	.01043	-.00117	.17328
300.310	99.707	-.04868	.02043	-.01889	.01089	-.00193	.17286
300.420	149.700	-.04690	.01876	-.01762	.01034	-.00246	.17221
300.390	199.710	-.05177	.02221	-.01444	.00833	-.00137	.17100
300.470	300.630	-.06243	.03067	-.00497	.00259	.00084	.17023
300.420	400.670	-.06593	.03318	-.00001	-.00100	.00063	.17095
300.530	600.890	-.06605	.03324	-.00002	-.00100	.00063	.17134
300.530	800.660	-.06598	.03323	.00005	-.00102	.00064	.17128
300.460	1000.200	-.06602	.03323	.00004	-.00101	.00063	.17127

RUN NO. 404/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.490	-1.160	-.05671	.02592	-.00677	.00441	-.00145	.17213
600.440	49.898	-.05567	.02487	-.00641	.00417	-.00199	.17173
600.540	99.906	-.05941	.02764	-.00516	.00293	-.00103	.17077
600.480	150.090	-.06485	.03232	-.00358	.00169	.00077	.17052
600.490	200.070	-.06511	.03250	-.00187	.00052	.00074	.17041
600.630	300.940	-.06597	.03319	.00008	-.00103	.00063	.17054
600.700	401.290	-.06599	.03323	.00003	-.00100	.00063	.17122
600.520	598.820	-.06600	.03324	.00001	-.00101	.00064	.17129
600.430	798.960	-.06599	.03323	.00002	-.00100	.00063	.17129
600.470	999.090	-.06604	.03325	.00004	-.00101	.00063	.17141

RUN NO. 405/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.750	.267	-.06149	.02926	-.00053	-.00057	-.00091	.17048
900.670	50.255	-.06607	.03324	.00001	-.00100	.00063	.17085
900.780	100.260	-.06599	.03319	-.00001	-.00099	.00063	.17068
900.650	150.150	-.06608	.03325	.00003	-.00101	.00064	.17108
900.740	200.090	-.06605	.03325	.00001	-.00100	.00063	.17125
900.640	299.350	-.06605	.03326	.00000	-.00100	.00063	.17125
900.530	398.310	-.06606	.03325	.00001	-.00101	.00064	.17136
900.930	601.150	-.06602	.03324	.00001	-.00100	.00063	.17139
900.830	800.810	-.06602	.03324	-.00002	-.00100	.00063	.17124
900.680	1000.300	-.06607	.03326	.00001	-.00100	.00063	.17143

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(58) W/O PLUMES SEPARATING FROM ORTIO

(RTJ131) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

RACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 400.000 PCHMR = .000

RUN NO. 410/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.178	-1.106	-.06409	.03178	-.00116	.00009	.00004	.17177
.117	49.886	-.06353	.03135	-.00108	.00003	-.00013	.17143
.179	100.010	-.06342	.03118	-.00094	-.00008	-.00022	.17136
.188	150.010	-.06357	.03124	-.00079	-.00024	-.00023	.17119
.260	199.990	-.06446	.03190	-.00046	-.00059	.00006	.17053
.253	300.190	-.06603	.03323	-.00005	-.00098	.00062	.17102
.260	400.310	-.06507	.03326	-.00005	-.00099	.00062	.17131
.283	600.140	-.06605	.03325	-.00002	-.00099	.00063	.17129
.155	799.910	-.06615	.03329	-.00003	-.00099	.00062	.17141
.349	999.980	-.06610	.03327	-.00007	-.00098	.00062	.17127

RUN NO. 408/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.370	-1.175	-.06407	.03169	-.00093	-.00007	-.00008	.17159
300.350	50.258	-.06397	.03153	-.00082	-.00021	-.00015	.17149
300.390	100.260	-.06461	.03203	-.00045	-.00056	.00006	.17124
300.520	150.130	-.06588	.03308	-.00010	-.00094	.00055	.17112
300.370	200.020	-.06596	.03320	-.00005	-.00099	.00062	.17105
300.410	300.040	-.06608	.03326	-.00002	-.00100	.00063	.17141
300.400	399.860	-.06513	.03329	-.00001	-.00098	.00062	.17146
300.420	599.580	-.06608	.03326	.00001	-.00100	.00063	.17134
300.380	799.550	-.06603	.03327	-.00002	-.00100	.00063	.17142
300.470	999.740	-.06610	.03325	.00003	-.00100	.00063	.17131

RUN NO. 407/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.510	-1.198	-.06472	.03215	-.00048	-.00057	.00012	.17118
600.520	49.868	-.06601	.03317	-.00005	-.00096	.00059	.17122
600.440	99.898	-.06605	.03324	.00000	-.00099	.00063	.17131
600.470	149.990	-.06605	.03326	.00002	-.00101	.00063	.17135
600.450	199.980	-.06601	.03323	-.00003	-.00099	.00063	.17120
600.480	300.150	-.06600	.03324	.00002	-.00100	.00063	.17127
600.540	400.270	-.06605	.03326	.00001	-.00100	.00063	.17135
600.500	600.600	-.06602	.03322	.00001	-.00100	.00063	.17114
600.640	800.470	-.06599	.03322	.00003	-.00101	.00063	.17125
600.630	999.780	-.06607	.03325	.00001	-.00100	.00063	.17133

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OF POOR QUALITY

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ131) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 400.000 PCMBR = .000

RUN NO. 406/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.600	.002	-.06598	.03322	-.00003	-.00098	.00063	.17127
900.710	50.373	-.06608	.03326	.00004	-.00101	.00063	.17137
900.580	100.440	-.06602	.03324	.00004	-.00101	.00063	.17137
900.670	150.350	-.06599	.03322	.00002	-.00100	.00063	.17129
900.760	200.270	-.06601	.03324	.00000	-.00100	.00063	.17137
900.750	300.110	-.06596	.03322	.00000	-.00100	.00063	.17119
900.650	399.810	-.06605	.03326	-.00001	-.00100	.00063	.17144
900.710	599.690	-.06601	.03323	.00001	-.00100	.00063	.17129
900.670	799.200	-.06599	.03322	-.00002	-.00100	.00063	.17124
900.760	999.460	-.06597	.03322	.00000	-.00100	.00063	.17123

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 800.000 PCMBR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ132) ( 31 JUL 75 )

RUN NO. 413/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.330	800.120	-.06631	.03329	-.00004	-.00099	.00042	.17129

RUN NO. 414/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.400	800.000	-.06631	.03330	.00001	-.00101	.00063	.17132

RUN NO. 415/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
600.450	800.010	-.06630	.03329	-.00001	-.00100	.00063	.17132

RUN NO. 416/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.500	799.930	-.06637	.03332	.00000	-.00100	.00063	.17141

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ133) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DIALPHA = -10.000 DBETA = .000  
 Y = 800.000 PCMR = .000

RUN NO. 417/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
1.361	802.160	-.06627	.03328	-.00006	-.00099	.00063	.17134

RUN NO. 418/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.350	799.980	-.08634	.03331	-.00004	-.00099	.00062	.17138

RUN NO. 419/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
800.440	800.070	-.06629	.03330	-.00002	-.00099	.00062	.17139

RUN NO. 420/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.660	799.970	-.08634	.03331	-.00002	-.00099	.00063	.17144

DATE 02 AUG 75

1A13 SOURCE DATA

1A13 848(88) W/O PLUMES SEPARATING FROM 08T10

(RTJ134) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 80.FT. ZRRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YRRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZRRP = 447.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
Y = 400.000 PCMBR = .000

RUN NO. 421/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.110	.038	-.06443	.03197	-.00182	.00058	.00008	.17220
.078	50.000	-.06308	.03092	-.00179	.00073	-.00032	.17185
.108	99.902	-.06246	.03039	-.00157	.00053	-.00054	.17158
.203	150.050	-.06257	.03036	-.00122	.00020	-.00059	.17138
.202	200.100	-.06337	.03003	-.00090	-.00020	-.00037	.17100
.256	300.020	-.06617	.03324	-.00005	-.00098	.00062	.17089
.288	400.450	-.06623	.03326	-.00004	-.00099	.00062	.17126
.288	600.210	-.06624	.03328	-.00004	-.00099	.00062	.17131
.203	800.060	-.06620	.03327	-.00002	-.00099	.00063	.17136
1.311	1002.200	-.06628	.03328	-.00004	-.00098	.00061	.17129

RUN NO. 422/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.530	1.069	-.06391	.03143	-.00138	.00037	-.00026	.17204
300.430	50.552	-.06342	.03103	-.00123	.00019	-.00040	.17164
300.390	100.380	-.06392	.03131	-.00088	-.00019	-.00028	.17148
300.430	150.450	-.06507	.03225	-.00042	-.00066	.00015	.17120
300.310	200.310	-.06623	.03328	-.00007	-.00097	.00061	.17119
300.310	300.090	-.06618	.03323	.00001	-.00100	.00063	.17110
300.320	399.960	-.06615	.03324	-.00002	-.00100	.00063	.17128
300.310	599.600	-.06619	.03327	-.00001	-.00099	.00063	.17134
300.260	799.710	-.06626	.03328	-.00002	-.00100	.00062	.17133
300.280	999.720	-.06610	.03320	.00002	-.00099	.00063	.17094

RUN NO. 423/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.430	-.142	-.06423	.03162	-.00085	-.00023	-.00017	.17141
600.450	49.977	-.06548	.03261	-.00036	-.00072	.00029	.17131
600.410	100.080	-.06622	.03325	-.00011	-.00097	.00061	.17117
600.450	150.150	-.06619	.03327	-.00009	-.00098	.00061	.17131
600.390	200.300	-.06620	.03327	-.00004	-.00099	.00062	.17129
600.490	300.300	-.06619	.03325	-.00001	-.00100	.00063	.17119
600.520	400.540	-.06622	.03327	-.00001	-.00100	.00062	.17122
600.630	500.630	-.06625	.03328	-.00001	-.00099	.00062	.17130
600.700	800.800	-.06629	.03330	-.00001	-.00100	.00063	.17145
600.570	1000.300	-.06628	.03329	-.00001	-.00100	.00063	.17147

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10 (RTJ134) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 424/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.620	.781	-.06618	.03326	-.00008	-.00097	.00061	.17125
900.720	50.492	-.06623	.03327	-.00008	-.00098	.00061	.17130
900.730	100.550	-.06624	.03327	-.00006	-.00098	.00062	.17129
900.810	150.590	-.06620	.03326	-.00007	-.00098	.00062	.17119
900.800	200.510	-.06623	.03327	-.00006	-.00098	.00062	.17132
900.770	300.090	-.06624	.03327	-.00005	-.00099	.00062	.17133
900.730	399.590	-.06615	.03324	-.00003	-.00099	.00062	.17108
900.620	599.250	-.06626	.03329	-.00008	-.00098	.00062	.17132
900.670	799.420	-.06619	.03324	-.00005	-.00099	.00062	.17110
900.750	999.440	-.06629	.03329	-.00003	-.00099	.00062	.17126

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 400.000 PCHMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 425/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.315	200.300	-.03889	.01705	-.03809	.00902	-.00468	.17367
.229	299.990	-.03263	.01800	-.03588	.01107	-.00344	.17432
.586	402.780	-.04293	.02281	-.02148	.00877	.00089	.17019
.477	601.120	-.06198	.03011	-.00162	.00021	.00071	.17029
.528	801.070	-.06618	.03323	-.00004	-.00099	.00062	.17103
1.484	1002.600	-.06621	.03327	-.00011	-.00098	.00061	.17132

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = .000 PCHMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10 (RTJ135) ( 31 JUL 75 )



IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10 (RTJ135) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRFF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = .000 PCMPBR = .000

RUN NO. 427/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.490	100.610	-.03339	.00698	-.03074	.01126	-.00694	.17399
300.490	150.560	-.03947	.01360	-.02980	.01100	-.00485	.17374
300.410	199.560	-.04134	.01683	-.02828	.01108	-.00326	.17273
300.450	300.160	-.04785	.02428	-.02234	.00956	.00062	.17103
300.470	401.420	-.04660	.02327	-.01552	.00738	.00123	.17039
300.640	601.270	-.06508	.03317	-.00010	-.00098	.00061	.17026
300.670	801.220	-.06611	.03322	-.00006	-.00099	.00062	.17102
301.710	1002.900	-.06628	.03328	-.00013	-.00096	.00061	.17125

RUN NO. 429/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.610	150.810	-.04931	.02079	.02333	.01133	-.00108	.17138
600.680	200.930	-.05537	.02684	-.02045	.01040	.00076	.17122
600.460	299.560	-.05559	.02691	-.01165	.00620	.00109	.17010
600.510	400.290	-.05784	.02735	-.00559	.00291	.00085	.17027
600.920	601.860	-.06630	.03330	-.00010	-.00096	.00061	.17111
600.750	801.210	-.06628	.03329	-.00009	-.00098	.00062	.17121
601.810	1003.300	-.06629	.03329	-.00012	-.00097	.00061	.17138

RUN NO. 432/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.630	200.810	-.05948	.02859	-.01156	.00706	.00110	.17042
900.620	299.810	-.06215	.03007	-.00353	.00166	.00076	.17020
900.650	400.170	-.06625	.03320	-.00007	-.00099	.00061	.17057
900.870	600.180	-.06532	.03328	-.00003	-.00099	.00062	.17129
901.000	801.220	-.06529	.03324	-.00004	-.00098	.00061	.17122
902.100	1003.700	-.06525	.03323	-.00001	-.00100	.00062	.17125

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ136) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 200.000 PCHMR = .000

RUN NO. 428/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.220	200.200	-.04157	.01495	-.02298	.01316	-.00358	.17285
.278	299.950	-.05465	.02483	-.01489	.00846	-.00041	.17092
.208	399.820	-.06156	.03003	-.00589	.00301	-.00086	.17018
.055	599.100	-.06629	.03328	-.00005	-.00098	.00062	.17127
.119	799.310	-.06620	.03326	-.00008	-.00098	.00062	.17124
.259	999.350	-.06622	.03326	-.00002	-.00099	.00062	.17125

RUN NO. 429/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.650	102.030	-.04392	.01646	-.02241	.01313	-.00328	.17404
300.440	150.530	-.04193	.01491	-.02200	.01308	-.00356	.17269
300.360	200.490	-.04370	.01589	-.01949	.01157	-.00315	.17164
300.300	300.130	-.06046	.02929	-.01013	.00597	.00105	.17023
300.250	399.220	-.06609	.03315	-.00021	-.00087	.00062	.17069
300.220	599.020	-.06620	.03326	-.00003	-.00100	.00062	.17114
300.280	799.200	-.06620	.03326	-.00008	-.00099	.00061	.17123
300.290	999.150	-.06629	.03330	-.00007	-.00097	.00061	.17131

RUN NO. 430/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.570	50.373	-.05208	.02179	-.00822	.00561	-.00300	.17232
600.610	100.390	-.05414	.02327	-.00744	.00483	-.00253	.17139
600.580	150.090	-.06110	.02893	-.00569	.00325	-.00037	.17019
600.450	198.950	-.06468	.03199	-.00444	.00231	.00080	.17036
600.330	298.620	-.06581	.03289	-.00052	-.00054	.00065	.17048
600.870	401.270	-.06623	.03320	-.00003	-.00099	.00052	.17074
600.720	601.010	-.06622	.03325	-.00002	-.00100	.00062	.17134
600.860	801.010	-.06634	.03320	-.00002	-.00100	.00062	.17139
601.840	1002.800	-.06632	.03330	-.00006	-.00098	.00061	.17121

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DATE 02 AUG 75 1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 08T10

(RTJ138) (31 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 SREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 200.000 PCMR = .000

RUN NO. 431/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.770	.880	-.05658	.02500	-.00144	.00025	-.00261	.17104
900.600	50.336	-.06472	.03171	-.00028	-.00088	.00002	.17045
900.660	100.310	-.06638	.03322	-.00011	-.00098	.00061	.17062
900.620	150.260	-.06534	.03325	-.00003	-.00099	.00061	.17089
900.640	200.230	-.06633	.03322	-.00003	-.00099	.00061	.17082
900.450	299.190	-.06632	.03323	-.00005	-.00099	.00062	.17106
800.210	397.880	-.06628	.03324	-.00006	-.00099	.00061	.17128
900.950	801.510	-.06638	.03327	-.00006	-.00098	.00061	.17133
900.970	800.990	-.06636	.03327	-.00001	-.00099	.00062	.17134
901.950	1003.300	-.06632	.03326	-.00001	-.00101	.00062	.17141

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ137) (31 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 SREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = .000 PCMR = .000

RUN NO. 433/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.471	601.940	-.02997	.01123	-.03154	.01883	.00171	.16761
.540	801.220	-.06503	.03213	-.00044	-.00067	.00064	.16828
-.039	999.780	-.06638	.03312	.00003	-.00102	.00082	.17013

RUN NO. 434/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.400	399.820	-.05056	.02144	-.00897	.00581	.00105	.16608
300.110	799.170	-.06628	.03233	-.00003	-.00100	.00062	.16701
300.230	999.240	-.06622	.03322	.00004	-.00101	.00063	.17121

RUN NO. 435/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.700	601.080	-.06627	.03302	-.00006	-.00096	.00062	.16885
800.900	801.210	-.06624	.03324	-.00002	-.00101	.00062	.17120
900.540	1000.400	-.06613	.03319	.00001	-.00101	.00062	.17101

DATE 02 AUG 75

A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORT10

(RTJ137) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 438/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CA
899.730	597.720	-.06626	.03322	.00003	-.00102	.00063
901.310	802.060	-.06615	.03321	-.00002	-.00100	.00062
900.270	999.100	-.06609	.03318	-.00003	-.00101	.00062

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = .000 PCMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 440/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CA
-.057	599.690	-.06407	.03103	-.00233	.00081	.00073
-.033	799.490	-.06627	.03274	.00000	-.00101	.00062
-.120	999.180	-.06624	.03323	.00006	-.00102	.00062

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = 200.000 PCMR = .000

RUN NO. 439/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CA
300.640	601.120	-.06599	.03337	-.00019	-.00097	.00061
300.750	801.260	-.06614	.03321	-.00002	-.00100	.00062
300.290	999.680	-.06600	.03317	-.00001	-.00100	.00062

RUN NO. 438/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CA
800.080	599.370	-.06621	.03323	-.00002	-.00099	.00061
800.350	799.940	-.06623	.03325	-.00003	-.00100	.00062
800.150	999.320	-.06620	.03323	-.00004	-.00100	.00062

RUN NO. 437/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CA
901.080	601.970	-.06610	.03318	-.00002	-.00100	.00062
900.940	801.200	-.06617	.03322	-.00007	-.00099	.00061
900.460	999.690	-.06618	.03321	-.00001	-.00100	.00062

(RTJ138) (31 JUL 75)

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ136) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. X1  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y1  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. Z1  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 400.000 PCMBR = .000

RUN NO. 441/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CA
.358	600.670	-.06815	.03322	-.00008	-.00099	.00081
.378	800.750	-.06622	.03324	-.00004	-.00100	.00061
-.018	999.220	-.06622	.03323	-.00002	-.00100	.03062

RUN NO. 442/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CA
300.510	601.080	-.06812	.03319	-.00008	-.00099	.00061
300.110	799.600	-.06605	.03316	-.00005	-.00098	.00061
300.100	999.410	-.06612	.03320	-.00006	-.00099	.00051

RUN NO. 443/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CA
600.700	601.040	-.06605	.03319	-.00003	-.00100	.00061
600.780	801.060	-.06611	.03320	-.00010	-.00098	.00061
800.610	1000.600	-.06612	.03320	-.00004	-.00100	.00081

RUN NO. 444/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CA
900.650	600.980	-.06605	.03318	-.00005	-.00098	.00061
900.280	799.180	-.06607	.03318	.00002	-.00100	.00061
900.390	999.360	-.06618	.03323	.00002	-.00100	.00062

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. X1  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y1  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. Z1  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 800.000 PCMBR = .000

RUN NO. 445/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CA
-.157	799.670	-.06621	.03324	-.00006	-.00098	.00061

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ140) ( 31 JUL 75 )

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 800.000 PCMBR = .000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBTIO

(RTJ140) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 800.000 PCMR = .000

RUN NO. 446/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.410	800.280	-.06618	.03323	-.00007	-.00093	.00062	.17128

RUN NO. 447/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.540	800.380	-.06619	.03324	-.00011	-.00097	.00061	.17129

RUN NO. 448/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.580	800.350	-.06620	.03323	-.00009	-.00098	.00061	.17125

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
Y = .000 PCMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBTIO

(RTJ141) (31 JUL 75)

RUN NO. 449/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.195	.271	-.06776	.03386	-.00786	-.00236	-.00020	.17379
.151	50.06	-.06710	.03387	-.00767	-.00206	-.00011	.17414
.302	99.787	-.05494	.03291	-.00943	-.00142	-.00038	.17436
.296	149.030	-.06143	.03183	-.01051	-.00029	-.00068	.17495
.230	200.170	-.05612	.02909	-.01250	.00065	-.00144	.17537
.237	299.920	-.04912	.02529	-.01277	.00230	-.00123	.17421
.217	401.320	-.05882	.02918	-.00538	.00214	.00088	.17258
.218	600.840	-.05568	.03336	.00005	-.00093	.00062	.17326
.321	800.030	-.05564	.03332	.00015	-.00096	.00062	.17338
.237	1000.100	-.05571	.03336	.00014	-.00095	.00052	.17356

DATE 02 AUG 75

1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ141) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 452/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.530	.130	-.05865	.02613	-.00948	.00539	-.00066	.17329
900.700	49.905	-.06423	.03126	-.00920	.00516	.00070	.17347
900.720	100.370	-.06412	.03165	-.00868	.00500	.00094	.1734.
900.590	150.620	-.06323	.03091	-.00713	.00422	.00092	.17323
900.630	200.580	-.06341	.03091	-.00422	.00230	.00080	.17287
900.690	300.350	-.06686	.03345	.00008	-.00394	.00062	.17298
900.610	400.060	-.06690	.03348	.00008	-.00394	.00062	.17345
900.620	500.950	-.06578	.03343	.00010	-.00075	.00062	.17333
900.690	600.870	-.06686	.03345	.00009	-.00094	.00062	.17334
900.610	1000.100	-.06664	.03332	.00025	-.00099	.00063	.17339

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
Y = .000 PCMBR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 450/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.132	-.829	-.06377	.03129	-.01094	.00606	.00004	.17448
.197	50.402	-.06197	.03008	-.00978	.00497	.00011	.17436
.122	100.240	-.06041	.02893	-.00896	.00454	-.00010	.17417
.176	150.260	-.05914	.02783	-.00739	.00410	-.00042	.17405
.267	200.160	-.05995	.028.	-.00695	.00363	-.00042	.17381
.271	300.130	-.06410	.03156	-.00363	.00167	.00081	.17327
.292	359.830	-.06590	.03278	-.00051	-.00045	.00065	.17290
.262	599.360	-.06659	.03331	.00012	-.00096	.00062	.17339
.394	800.000	-.06656	.03329	.00018	-.00097	.00063	.17329
.280	1000.030	-.06667	.03333	.00012	-.00096	.00062	.17339

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
Y = 200.000 PCMBR = .000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ142) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = 5.000  
 Y = 200.000 PCHMBR = .000

RUN NO. 453/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.500	-.826	-.06627	.03285	.00000	-.00090	.00037	.17310
900.610	49.924	-.06692	.03348	.00011	-.00095	.00062	.17324
900.680	99.874	-.06689	.03346	.00010	-.00094	.00062	.17311
900.630	149.830	-.06691	.03347	.00010	-.00095	.00062	.17328
900.570	199.900	-.06687	.03347	.00015	-.00096	.00062	.17331
900.690	300.090	-.06688	.03347	.00010	-.00095	.00062	.17336
900.570	400.740	-.06679	.03345	.00013	-.00096	.00062	.17327
900.580	600.860	-.06695	.03351	.00010	-.00095	.00062	.17348
900.670	799.940	-.06688	.03347	.00012	-.00096	.00062	.17338
900.570	999.510	-.06686	.03347	.00010	-.00094	.00062	.17342

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ143) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = 5.000  
 Y = 400.000 PCHMBR = .000

RUN NO. 451/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.117	-.003	-.06542	.03239	-.00051	-.00033	.00024	.17340
.203	49.985	-.06512	.03213	-.00052	-.00030	.00010	.17361
.227	99.913	-.06507	.03205	-.00048	-.00037	.00005	.17352
.228	149.950	-.06559	.03239	-.00022	-.00061	.00019	.17334
.240	193.950	-.06643	.03344	.00006	-.00090	.00055	.17304
.176	300.040	-.06664	.03330	.00014	-.00096	.00062	.17320
.106	400.070	-.06656	.03329	.00011	-.00096	.00062	.17329
.270	599.880	-.06665	.03331	.00014	-.00098	.00062	.17327
.190	799.930	-.06662	.03331	.00013	-.00098	.00062	.17337
.263	1000.000	-.06667	.03332	.00012	-.00096	.00062	.17340

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IA13 SRB(SB) W/C PLUMES SEPARAT FROM OST10

(RTJ143) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 454/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.660	-1.247	-.06653	.03325	.00006	-.00094	.00081	.17289
900.600	49.769	-.06641	.03322	.00007	-.00093	.00061	.17273
900.650	99.717	-.06650	.03326	.00009	-.00094	.00061	.17297
900.600	149.720	-.06640	.03321	.00011	-.00094	.00062	.17278
900.590	199.780	-.06643	.03322	.00010	-.00094	.00061	.17286
900.570	300.210	-.06643	.03323	.00012	-.00094	.00062	.17295
900.640	400.370	-.06647	.03325	.00013	-.00095	.00061	.17293
900.620	500.420	-.06653	.03325	.00012	-.00095	.00062	.17305
900.640	600.120	-.06642	.03323	.00015	-.00095	.00061	.17282
900.650	1000.000	-.06642	.03322	.00012	-.00095	.00061	.17282

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 PCMBR = 400.000 PCMBR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

(RTJ144) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 455/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.814	-1.188	-.05375	.02428	-.03182	.01497	-.00135	.17430
.184	49.811	-.05088	.02287	-.02981	.01397	-.00128	.17486
.220	99.750	-.04828	.02102	-.02516	.01175	-.00114	.17435
.294	149.780	-.04585	.01908	-.02247	.01127	-.00158	.17431
.208	199.830	-.04958	.02157	-.01849	.00975	-.00089	.17315
.328	300.250	-.05961	.02890	-.00888	.00483	.00099	.17210
.405	400.390	-.06334	.03100	-.00271	.00111	.00078	.17254
.341	500.530	-.06840	.03322	.00011	-.00095	.00062	.17275
.245	600.180	-.06841	.03322	.00010	-.00094	.00062	.17278
.258	999.980	-.06845	.03323	.00007	-.00093	.00060	.17286

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 Y = 200.000 PCMBR = .000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10 (RTJ144) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 456/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.140	.107	-.05490	.02466	-.02462	.01360	-.00088	.17467
303.440	50.108	-.05071	.02202	-.02225	.01197	-.00095	.17451
307.400	100.160	-.04593	.01849	-.02200	.01232	-.00198	.17440
304.570	150.220	-.04482	.01721	-.01985	.01131	-.00245	.17338
300.360	200.380	-.05250	.02298	-.01610	.00903	-.00050	.17222
300.460	300.370	-.06119	.02953	-.00680	.00390	.00091	.17204
300.340	399.460	-.06628	.03318	.00013	-.00095	.00062	.17241
300.320	599.440	-.06632	.03320	.00010	-.00094	.00061	.17262
300.380	799.520	-.06645	.03326	.00010	-.00094	.00061	.17291
300.480	999.540	-.06639	.03322	.00009	-.00094	.00061	.17275

RUN NO. 457/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.570	.163	-.0559	.02491	-.00904	.00612	-.00150	.17364
600.460	50.023	-.0556	.02435	-.00839	.00556	-.00189	.17291
600.490	100.020	-.06204	.02964	-.00664	.00400	.00007	.17216
600.470	149.930	-.06444	.03169	-.00526	.00302	.00084	.17209
600.380	199.410	-.06453	.03177	-.00354	.00178	.00076	.17183
600.290	299.040	-.06646	.03326	.00015	-.00098	.00061	.17230
600.730	400.660	-.06620	.03315	.00007	-.00093	.00061	.17231
600.570	600.470	-.06638	.03322	.00006	-.00093	.00061	.17273
600.650	800.530	-.06640	.03323	.00007	-.00094	.00061	.17281
600.630	999.990	-.06640	.03324	.00005	-.00094	.00061	.17286

RUN NO. 458/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.560	-.091	-.06495	.03181	-.00007	-.00086	.00009	.17187
900.660	50.019	-.06539	.03318	.00008	-.00094	.00061	.17198
900.670	99.861	-.06640	.03318	.00009	-.00093	.00061	.17204
900.680	149.890	-.06633	.03318	.00010	-.00094	.00061	.17235
900.630	199.940	-.06648	.03325	.00010	-.00095	.00061	.17271
900.720	299.970	-.06636	.03321	.00012	-.00094	.00060	.17268
900.690	400.470	-.06638	.03322	.00008	-.00094	.00061	.17277
900.730	601.030	-.06624	.03319	.00009	-.00094	.00061	.17273
900.530	798.890	-.06630	.03321	.00006	-.00094	.00061	.17284
900.600	999.430	-.06639	.03321	.00008	-.00093	.00061	.17272

## PARAMETRIC DATA

MACH = 4 ) PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = -5.000  
Y = 200.000 PC-MBR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ145) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = -5.000  
Y = 400.000 PCMRBR = .000

RUN NO. 462/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.118	-.286	-.06266	.03026	-.00233	.00115	-.00046	.17321
.231	50.105	-.06335	.03081	-.00184	.00077	-.00022	.17314
.261	100.130	-.06323	.03072	-.00130	.00036	-.00029	.17250
.259	150.180	-.06405	.03122	-.00074	-.00019	-.00024	.17258
.136	200.160	-.06530	.03225	-.00021	-.00069	.00019	.17215
.172	299.960	-.06641	.03319	.00004	-.00092	.00061	.17250
.126	399.960	-.06647	.03324	.00008	-.00094	.00060	.17287
.130	599.730	-.06644	.03322	.00004	-.00093	.00060	.17281
.236	799.740	-.06647	.03322	.00002	-.00092	.00060	.17270
.346	1000.100	-.06643	.03321	.00002	-.00092	.00060	.17270

RUN NO. 461/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.460	-.021	-.06387	.03112	-.00098	.00007	-.00033	.17331
300.410	49.998	-.06408	.03127	-.00075	-.00017	-.00026	.17273
300.370	99.827	-.06518	.03213	-.00032	-.00060	.00011	.17247
300.430	150.100	-.06640	.03319	.00006	-.00093	.00050	.17256
300.380	199.990	-.06649	.03325	.00010	-.00094	.00061	.17278
300.450	299.870	-.06639	.03322	.00006	-.00093	.00060	.17271
300.430	400.100	-.06641	.03323	.00002	-.00093	.00061	.17276
300.430	600.150	-.06645	.03323	.00008	-.00094	.00060	.17277
300.450	800.050	-.06641	.03322	.00008	-.00094	.00061	.17271
300.440	999.860	-.06649	.03324	.00005	-.00093	.00060	.17285

RUN NO. 460/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.620	.021	-.06431	.03143	-.00094	-.00037	-.00020	.17258
600.440	50.239	-.06819	.03301	-.00036	-.00086	.00050	.17255
600.540	100.140	-.06643	.03323	.00001	-.00092	.00060	.17275
600.520	149.970	-.06632	.03318	.00005	-.00093	.00060	.17265
600.500	200.040	-.06629	.03317	.00004	-.00093	.00060	.17261
600.550	300.260	-.06642	.03322	.00009	-.00094	.00061	.17277
600.490	399.940	-.06646	.03324	.00007	-.00093	.00061	.17280
600.540	599.870	-.06625	.03315	.00005	-.00094	.00060	.17244
600.480	799.710	-.06642	.03324	.00007	-.00094	.00060	.17279
600.340	999.610	-.06641	.03321	.00013	-.00095	.00061	.17262

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ145) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 458/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.620	-1.311	-.06638	.03322	.00000	-.00072	.00060	.17283
900.650	49.793	-.06644	.03324	.00003	-.00093	.00060	.17290
900.580	99.834	-.06637	.03320	.00004	-.00093	.00061	.17268
900.520	149.960	-.06642	.03324	.00007	-.00094	.00060	.17287
900.800	199.870	-.06641	.03323	.00015	-.00095	.00061	.17295
900.740	300.260	-.06638	.03323	.00005	-.00093	.00061	.17292
900.710	400.170	-.06645	.03323	.00005	-.00093	.00061	.17281
900.730	600.300	-.06640	.03324	.00005	-.00093	.00060	.17285
900.620	800.380	-.06640	.03322	.00008	-.00094	.00060	.17268
900.740	999.770	-.06639	.03321	.00012	-.00094	.00061	.17273

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 Y = 400.000 PCHEER = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 463/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.323	401.730	-.05184	.02599	-.00758	.00283	.00093	.17264
.382	600.680	-.06605	.03286	-.00010	-.00080	.00062	.17253
.203	800.380	-.06654	.03324	.00004	-.00092	.00060	.17277
.369	999.960	-.06660	.03328	.00002	-.00092	.00060	.17290

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 Y = .000 PCHEER = .000

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OF POOR QUALITY

1A13 SR8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ148) ( 31 JUL 75 )

## REFERENCE DATA

SCALE = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 V = .000 PCMPR = .000

RUN NO. 465/ 0 RN/L = 5.63

X	Z	CN	CLM	CY	CYN	CBL	CA
800.310	397.530	-.06204	.02892	-.00188	.00095	.00073	.17210
800.800	601.450	-.06644	.03320	.00008	-.00094	.00060	.17253
800.650	800.620	-.06651	.03324	.00005	-.00092	.00060	.17277
800.510	1000.200	-.06654	.03326	.00003	-.00092	.00060	.17288

RUN NO. 466/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.550	399.590	-.06634	.03316	.00007	-.00092	.00060	.17225
900.850	602.370	-.06641	.03321	.00008	-.00094	.00061	.17265
900.600	798.960	-.06651	.03324	.00008	-.00093	.00060	.17280
900.570	999.120	-.06654	.03326	.00008	-.00094	.00061	.17282

1A13 SR8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ147) ( 31 JUL 75 )

## REFERENCE DATA

SCALE = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 V = .000 PCMPR = .000

RUN NO. 467/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
245	800.190	-.06654	.03326	.00009	-.00094	.00061	.17278

RUN NO. 468/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.290	799.960	-.06651	.03325	.00001	-.00092	.00060	.17273

RUN NO. 469/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
800.480	799.970	-.06651	.03325	.00008	-.00093	.00060	.17275

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IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ147) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 470/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.870	800.030	-.06654	.03326	.00008	-.00094	.00060	.17277

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 Y = 800.000 PCMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 471/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.236	399.850	-.04706	.02461	-.00745	.00213	.00090	.17280
.490	600.810	-.03303	.03214	-.00036	-.00063	.00062	.17212
.251	800.280	-.06661	.04331	.00007	-.00094	.00060	.17297
.114	1000.000	-.06651	.03326	.00009	-.00094	.00060	.1727

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = 10.000  
 Y = .000 PCMR = .000

RUN NO. 472/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.210	399.280	-.04818	.02340	-.00829	.00354	.00099	.17238
300.250	598.580	-.06659	.03322	.00002	-.00093	.00060	.17253
300.150	798.560	-.06651	.03326	.00000	-.00092	.00060	.17277
300.340	999.110	-.06642	.03323	.00008	-.00094	.00061	.17268

RUN NO. 473/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
800.560	400.050	-.05987	.02841	-.00254	.00102	.00076	.17187
600.940	601.860	-.06641	.03320	.00004	-.00093	.00060	.17255
600.810	800.820	-.06656	.03327	.00003	-.00093	.00060	.17285
600.660	1000.000	-.06642	.03321	.00005	-.00093	.00060	.17269

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DATE 02 AUG 75

1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORT10

(RTJ148) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 474/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.440	399.290	-.06632	.03314	.00004	-.00092	.00060	.17186
900.520	599.850	-.06640	.03321	.00011	-.00095	.00061	.17258
900.950	799.760	-.06655	.03326	.00006	-.00092	.00060	.17278
900.490	958.790	-.06650	.03323	.00007	-.00094	.00061	.17271

PARAMETRIC DATA

MACH = 4.530 PTOAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -10.000  
 Y = .000 PCHEER = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORT10

(RTJ148) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 475/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
283	199.710	-.03362	.01152	-.02964	.01437	-.00243	.17239
175	300.660	-.05219	.02473	-.01679	.00907	.00125	.17220
469	400.400	-.06020	.02877	-.00529	.00282	.00084	.17188
541	600.590	-.06654	.03324	.00004	-.00092	.00060	.17260
301	800.140	-.06650	.03325	.00009	-.00094	.00060	.17271
177	1000.000	-.06652	.03324	.00013	-.00095	.00061	.17273

PARAMETRIC DATA

MACH = 4.530 PTOAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -10.000  
 Y = 200.000 PCHEER = .000

RUN NO. 477/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
300.370	113	-.04776	.01929	-.04068	.02381	-.00176	.17428
300.430	49.849	-.04508	.01810	-.03631	.02047	-.00131	.17409
300.360	99.063	-.03944	.01423	-.03138	.01717	-.00199	.17383
300.010	149.800	-.03711	.01228	-.02792	.01539	-.00291	.17304
300.380	198.980	-.04277	.01606	-.02331	.01293	-.00164	.17193
300.590	300.470	-.05893	.02678	-.01207	.00728	-.00114	.17169
300.690	400.750	-.06630	.03307	-.00008	-.00080	.00061	.17217
300.640	600.510	-.06664	.03330	.00006	-.00093	.00060	.17278
300.460	800.440	-.06656	.03327	.00007	-.00094	.00060	.17278
300.320	1000.100	-.06663	.03328	.00008	-.00094	.00060	.17277

DATE 02 AUG 75  
1A13 SOURCE DATA  
1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORBIT

(RTJ149) (31 JUL 75)

REFERENCE DATA  
SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
W.F = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = -10.000  
Y = 200.000 PCHMR = .000

RUN NO. 478/ 0 RN/L = 8.64

X	Z	CN	CLM	CY	CYN	CBL	CA
600.600	-0.052	-0.05262	.02239	-0.01433	.00978	-0.00188	.17286
600.420	49.601	-0.05113	.02078	-0.01292	.00866	-0.00240	.17239
600.480	99.841	-0.05858	.02669	-0.01062	.00674	-0.00045	.17178
600.550	150.110	-0.06299	.03068	-0.00866	.00537	.00098	.17172
600.610	199.930	-0.06296	.03056	-0.00550	.00394	.00090	.17143
600.960	300.770	-0.06566	.03253	-0.00083	.00017	.00066	.17193
600.890	400.840	-0.06651	.03320	.00011	-0.00094	.00060	.17209
600.230	599.650	-0.06653	.03325	.00007	-0.00094	.00060	.17284
600.330	799.190	-0.06657	.03326	.00010	-0.00095	.00060	.17270
600.430	999.160	-0.06661	.03329	.00072	-0.00093	.00060	.17280

RUN NO. 479/ 0 RN/L = 8.64

X	Z	CN	CLM	CY	CYN	CBL	CA
900.820	.274	-0.06354	.03050	-0.00012	-0.00086	-0.00035	.17119
900.710	50.209	-0.06657	.03320	.00013	-0.00100	.00059	.17146
900.550	100.150	-0.06646	.03315	.00010	-0.00097	.00060	.17122
900.700	150.140	-0.06640	.03315	.00006	-0.00093	.00050	.17160
900.580	200.020	-0.06656	.03322	.00001	-0.00092	.00060	.17212
900.420	299.400	-0.06659	.03326	.00003	-0.00093	.00060	.17251
900.160	398.250	-0.06659	.03327	.00001	-0.00092	.00059	.17273
901.000	601.020	-0.06648	.03323	.00005	-0.00093	.00060	.17250
900.950	800.580	-0.06650	.03323	.00006	-0.00093	.00060	.17254
900.890	1000.100	-0.06654	.03327	.00006	-0.00094	.00060	.17269



1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ150) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2680.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 476/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.176	- .056	-.05638	.02515	-.00719	.00500	-.00187	.17295
.272	49.826	-.05787	.02627	-.00625	.00420	-.00160	.17281
.308	99.824	-.06105	.02884	-.00444	.00269	-.00073	.17232
.348	149.840	-.06232	.02979	-.00309	.00163	-.00050	.17206
.275	199.850	-.06396	.03107	-.00145	.00034	-.00009	.17143
.269	300.020	-.06643	.03318	.00004	-.00092	.00060	.17199
.442	400.220	-.06659	.03324	.00005	-.00092	.00060	.17254
.479	600.150	-.06662	.03327	.00009	-.00094	.00060	.17281
.379	799.940	-.06658	.03325	.00007	-.00093	.00060	.17237
.162	1000.200	-.06651	.03323	.00013	-.00094	.00060	.17239

RUN NO. 482/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.270	-.331	-.05969	.02764	-.00178	.00086	-.00165	.17270
300.310	50.053	-.06212	.02944	-.00113	.00020	-.00096	.17191
300.340	100.110	-.06433	.03122	-.00051	-.00039	-.00024	.17116
300.260	150.160	-.06637	.03297	-.00001	-.00088	.00049	.17196
300.320	200.100	-.06662	.03324	.00004	-.00094	.00060	.17224
300.220	300.050	-.06667	.03326	.00005	-.00093	.00060	.17258
300.280	400.080	-.06657	.03325	.00006	-.00094	.00060	.17271
300.190	599.800	-.06664	.03327	.00005	-.00093	.00059	.17266
300.170	799.510	-.06661	.03323	.00007	-.00093	.00059	.17247
300.470	999.650	-.06659	.03324	.00007	-.00093	.00060	.17259

RUN NO. 481/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.500	-.232	-.06226	.02954	-.00113	.00013	-.00101	.17230
600.490	49.979	-.06529	.03199	-.00035	-.00064	.00003	.17212
600.600	99.831	-.06661	.03325	-.00002	-.00092	.00059	.17242
600.620	150.010	-.06660	.03324	.00002	-.00093	.00059	.17237
600.590	199.800	-.06662	.03327	.00001	-.00092	.00059	.17265
600.590	300.320	-.06661	.03325	.00001	-.00092	.00059	.17256
600.710	399.870	-.06666	.03328	.00002	-.00091	.00058	.17272
600.770	600.240	-.06663	.03327	.00002	-.00092	.00059	.17266
600.690	800.390	-.06666	.03329	.00007	-.00093	.00060	.17276
600.630	999.700	-.06662	.03328	.00004	-.00092	.00059	.17268

## PARAMETRIC DATA

MACH = 1.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -10.000  
 Y = 400.000 PCHWR = .000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ151) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 480/ 0 RN/L = 6.83

X	Z	CN	CLM	CY	CYN	CBL	CA
900.460	.042	-.06650	.03323	.00002	-.00092	.00059	.17245
900.580	50.267	-.06649	.03322	.00002	-.00092	.00059	.17256
900.640	100.140	-.06661	.03326	.00003	-.00092	.00059	.17276
900.670	150.120	-.06655	.03324	.00005	-.00093	.00060	.17270
900.700	200.150	-.06656	.03324	.00004	-.00092	.00059	.17266
900.730	300.290	-.06658	.03326	.00004	-.00093	.00059	.17272
900.500	400.050	-.06662	.03327	.00005	-.00093	.00060	.17271
900.370	599.520	-.06664	.03328	.00005	-.00093	.00060	.17278
900.440	799.600	-.06656	.03323	.00001	-.00092	.00059	.17248
900.510	999.410	-.06664	.03328	.00001	-.00092	.00059	.17276

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -10.000  
 Y = 400.000 PC-MBR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 483/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
.064	800.170	-.06666	.03328	.00008	-.00093	.00080	.17263

RUN NO. 484/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
300.440	799.960	-.06648	.03320	.00004	-.00092	.00059	.17233

RUN NO. 485/ 0 RN/L = 6.83

X	Z	CN	CLM	CY	CYN	CE	CA
600.590	799.990	-.06673	.03332	.00004	-.00092	.00059	.17286

RUN NO. 486/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
900.540	800.060	-.06659	.03327	.00005	-.00093	.00060	.17262

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -10.000  
 Y = 900.000 PC-MBR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ151) ( 31 JUL 75 )

ORIGINAL PAGE IS  
OF POOR QUALITY

DATE 02 JUL 75 1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10 (RTJ152) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 487/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
-601	800.220	-.06663	.03328	-.00010	-.00089	.00058	.17269

RUN NO. 488/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
300.260	799.990	-.06649	.03322	-.00011	-.00087	.00057	.17240

RUN NO. 489/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
600.870	799.830	-.06658	.03327	-.00009	-.00089	.00058	.17264

RUN NO. 490/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
900.710	800.030	-.06661	.03327	-.00010	-.00088	.00058	.17270

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -20.000  
 Y = 800.000 PCHGR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 494/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.097	298.780	-.05048	.02176	-.01824	.01210	.00142	.16912

X	Z	CN	CLM	CY	CYN	CBL	CA
.592	400.170	-.06299	.03049	-.00224	.00085	.00071	.17003

X	Z	CN	CLM	CY	CYN	CBL	CA
-.019	599.830	-.06660	.03324	-.00014	-.00088	.00057	.17252

X	Z	CN	CLM	CY	CYN	CBL	CA
.422	800.080	-.06653	.03323	-.00005	-.00090	.00058	.17249

X	Z	CN	CLM	CY	CYN	CBL	CA
-.737	1000.100	-.06659	.03328	-.00008	-.00090	.00057	.17260

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -20.000  
 Y = 400.000 PCHGR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10 (RTJ153) ( 31 JUL 75 )

IA13 SRS(SB) W/O PLUMES SEPARATING FROM 08710

(RTJ153) (31 JUL 75)

## REFERENCE DATA

SCIF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = -20.000  
Y = 400.000 PCMR = .000

RUN NO. 491/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.740	- .008	-.03674	.00944	-.03222	.02405	-.00423	.16889
300.280	49.782	-.03817	.01025	-.02742	.02031	-.00420	.16925
300.270	99.621	-.04458	.01517	-.02115	.01544	-.00329	.16856
300.180	149.870	-.05540	.02414	-.01451	.01012	-.00073	.16859
300.180	199.860	-.06200	.02974	-.00840	.00550	.00095	.16920
300.060	299.890	-.06555	.03321	.00004	-.00099	.00058	.17120
300.630	399.850	-.06659	.03317	-.00012	-.00089	.00058	.17166
300.080	599.830	-.06652	.03321	-.00014	-.00088	.00057	.17242
300.670	800.560	-.06654	.03323	-.00012	-.00089	.00058	.17254
299.390	1000.200	-.06649	.03320	-.00018	-.00086	.00056	.17236

RUN NO. 492/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.160	.248	-.05186	.02091	-.00281	.00172	-.00404	.17143
600.220	50.031	-.05722	.02510	-.00150	.00049	-.00253	.17015
600.370	99.983	-.06481	.03125	-.00032	.00070	-.00018	.16965
600.430	150.180	-.06664	.03283	-.00003	-.00090	.00057	.16319
600.400	199.980	-.06673	.03295	-.00007	-.00089	.00058	.16396
600.430	299.950	-.06577	.03325	-.00005	-.00090	.00058	.17193
600.540	400.210	-.06565	.03324	-.00004	-.00090	.00058	.17234
600.060	600.050	-.06564	.03327	-.00007	-.00088	.00057	.17261
600.030	799.530	-.06654	.03323	-.00003	-.00090	.00058	.17245
600.160	999.100	-.06662	.03327	-.00005	-.00089	.00057	.17261

RUN NO. 493/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.600	.018	-.06533	.03136	-.00044	-.00065	.00007	.16892
900.520	50.092	-.06649	.03261	-.00013	-.00087	.00027	.16920
900.370	99.909	-.06668	.03292	-.00013	-.00088	.00026	.17023
900.210	149.640	-.06683	.03313	-.00014	-.00089	.00027	.17137
900.090	199.600	-.06654	.03323	-.00011	-.00088	.00027	.17222
900.210	299.410	-.06657	.03326	-.00009	-.00088	.00027	.17263
900.850	400.060	-.06641	.03318	-.00010	-.00087	.00027	.17224
900.900	600.280	-.06650	.03323	-.00012	-.00087	.00027	.17250
901.080	800.590	-.06658	.03324	-.00013	-.00087	.00027	.17242
903.900	1000.200	-.06658	.03325	-.00008	-.00088	.00027	.17254

1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORTIO

(RTJ154) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -20.000  
 Y = .000 PCMRBR = .000

RUN NO. 495/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.145	399.880	-.03908	.02438	-.00361	-.07122	.00058	.17304
1.174	601.820	-.06135	.02943	-.00107	-.03015	.00063	.17137
.282	800.010	-.06659	.03324	-.00005	-.00089	.00057	.17244
-.620	1000.100	-.06672	.03328	.00000	-.00090	.00057	.17258

RUN NO. 496/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
299.780	397.580	-.03964	.02037	-.00796	.00236	.00090	.17252
300.020	599.870	-.06656	.03323	-.00008	-.00088	.00058	.17191
300.500	800.030	-.06663	.03326	-.00005	-.00089	.00057	.17244
300.130	998.920	-.06661	.03326	.00001	-.00090	.00058	.17253

RUN NO. 499/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.620	400.040	-.05294	.02387	-.00443	.00212	.00082	.17163
600.350	599.790	-.06663	.03327	-.00009	-.00089	.00057	.17240
601.010	801.490	-.06659	.03324	-.00009	-.00088	.00057	.17233
599.490	1000.100	-.06659	.03324	-.00003	-.00089	.00058	.17239

RUN NO. 500/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
899.990	399.750	-.06645	.03320	-.00010	-.00084	.00057	.17149
900.240	599.980	-.06656	.03325	-.00007	-.00089	.00057	.17253
900.180	799.910	-.06656	.03324	-.00002	-.00090	.00057	.17242
899.980	997.730	-.06661	.03327	-.00005	-.00089	.00057	.17263

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1A13 SOURCE DATA

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1A13 SR8158) W/O PLUMES SEPARATING FROM 09T10

(RTJ155) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. X1  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = -20.000  
Y = 200.000 PCH#BR = .000

RUN NO. 498/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
.049	400.400	-.03840	.01660	-.01512	.00783	.00122	.17181
-.221	598.800	-.06664	.03325	-.00012	-.00086	.00058	.17189
-.490	798.700	-.06650	.03320	-.00008	-.00088	.00057	.17238
.296	999.600	-.06662	.03325	-.00007	-.00090	.00057	.17240

RUN NO. 497/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
300.910	400.230	-.05298	.02347	-.00865	.00531	.00098	.17069
300.210	599.870	-.06669	.03325	-.00006	-.00089	.00057	.17246
300.680	800.790	-.06659	.03325	-.00009	-.00088	.00056	.17248
300.370	999.840	-.06653	.03320	-.00007	-.00089	.00057	.17224

RUN NO. 532/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
600.640	199.960	-.05265	.02340	-.02066	.01361	.00149	.16944
600.800	300.000	-.05820	.02699	-.00885	.00568	.00098	.17054
600.710	399.440	-.06638	.03302	-.00013	-.00079	.00059	.17132
600.250	599.670	-.06652	.03320	-.00004	-.00089	.00057	.17220
600.970	801.030	-.06669	.03328	.00001	-.00091	.00058	.17257
599.610	1000.200	-.06657	.03322	.00000	-.00091	.00058	.17229

RUN NO. 501/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
900.760	.471	-.05355	.02167	-.00910	.00625	-.00234	.16786
900.270	50.553	-.06522	.03229	-.00608	.00377	.00024	.16889
900.150	100.220	-.06530	.03229	-.00300	.00151	.00074	.16906
900.240	150.060	-.06607	.03287	-.00045	-.00056	.00061	.17002
899.620	200.090	-.06653	.03319	.00011	-.00102	.00057	.17096
900.650	299.970	-.06656	.03318	-.00003	-.00090	.00058	.17144
900.890	400.080	-.06661	.03327	-.00002	-.00089	.00057	.17233
900.300	599.860	-.06655	.03324	-.00006	-.00089	.00057	.17246
900.420	799.820	-.06646	.03319	-.00002	-.00091	.00058	.17221
899.690	1000.200	-.06652	.03321	-.00008	-.00088	.00056	.17234

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09110

(RTJ158) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = .000  
Y = .000 PCMR = 1500.000

RUN NO. 511/ 0 RM/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
.314	-.058	-.00549	-.07378	-.14194	-.01641	.00039	.09377
.457	48.815	-.00177	-.05911	-.2148	-.04930	.01323	.09900
.370	99.869	.01550	-.02712	-.30525	-.08470	.01835	.12080
.319	150.120	.09161	.00053	-.34982	-.07848	.01927	.13606
.348	200.370	.15989	.02342	-.31966	-.07354	.01771	.14107
.517	298.580	.21536	.04209	-.21313	-.05407	.01105	.14734
.151	400.380	.20405	.05065	-.15022	-.03778	.00474	.15716
-.675	600.400	.15319	.02150	-.07945	-.00550	-.00040	.15082

RUN NO. 514/ 0 RM/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
900.750	-.152	.38868	-.25117	-.22780	.12119	-.05983	.16438
900.770	50.138	.35907	-.23222	-.35818	.19668	-.06032	.16194
900.670	100.420	.29873	-.19302	-.42553	.23541	-.05161	.16726
900.770	150.390	.29117	-.18148	-.44479	.26401	-.03790	.16714
900.870	200.050	.26898	-.17088	-.42212	.23975	-.02850	.16650
900.820	299.970	.27277	-.16654	-.27790	.18344	-.01971	.16560
900.930	398.280	.24734	-.14938	-.18582	.10870	-.01901	.16550
699.820	500.290	.28263	-.18862	-.11838	.07253	-.01605	.16765

DATE 02 AUG 75

IA13 SOURCE DATA

IA13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ159) ( 31 JUL 75 )

REFERENCE DATA

SREF = 269C.3000 SQ.FT. XHRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YHRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZHRP = 447.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = .000  
 Y = 200.000 PCHMR = 1500.000

RUN NO. 512/ 0 RN/L = 1.77

X	Z	CN	CLM	CY	CYN	CBL	CA
.259	.118	-.08582	.02478	-.17370	-.00988	-.01408	.16671
.321	50.589	-.05597	.01844	-.20581	-.00777	-.01529	.15509
.285	100.790	-.02077	.00974	-.25192	-.00630	-.01836	.14308
.311	150.560	.00278	.00548	-.27436	-.01098	-.01865	.13570
.284	200.870	.03085	.00658	-.28310	-.01423	-.01643	.13316
.396	301.030	.06691	.02034	-.26931	-.01058	-.01095	.14269
.310	400.730	.08353	.02721	-.25760	-.00019	-.01032	.15655
.397	539.930	.12838	-.00662	-.18549	.02565	-.01214	.17136

RUN NO. 515/ 0 RN/L = 1.77

X	Z	CN	CLM	CY	CYN	CBL	CA
900.700	-1.273	.09950	-.07948	-.13865	.06997	-.04878	.17029
900.830	50.382	.12035	-.07860	-.19716	.09335	-.04717	.15877
900.800	100.000	.14539	-.09304	-.18359	.09368	-.04272	.15360
900.710	150.330	.16851	-.09502	-.21391	.10130	-.03970	.15873
900.800	200.200	.19400	-.10645	-.24662	.11790	-.04088	.16124
900.650	300.440	.25865	-.14701	-.24097	.12581	-.04437	.16781
900.680	400.960	.34942	-.20915	-.24581	.13818	-.05929	.17102
900.620	597.730	.25784	-.18901	-.13295	.09187	-.01573	.15381



IA13.S38(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ160) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = .000  
 Y = 400.000 PCNMR = 1500.000

RUN NO. 513/ 0 RN/L = 1.73

X	Z	CN	CLM	CY	CYN	CBL	CA
.305	-.065	-.15473	.05188	-.16193	.01302	-.01387	.18235
.248	48.668	-.14498	.04718	-.18927	.01827	-.01707	.17825
.233	99.362	-.12422	.04015	-.21298	.02148	-.02028	.17740
.397	148.880	-.09530	.03374	-.23471	.02858	-.02324	.17525
.245	188.840	-.08427	.03082	-.25134	.03322	-.02483	.17287
.347	289.400	-.05589	.02273	-.27842	.04843	-.02433	.16931
.193	395.990	.02746	.01245	-.29385	.06146	-.02378	.17759
.375	598.750	.13755	-.03824	-.24883	.08064	-.01843	.18161

RUN NO. 516/ 0 RN/L = 1.73

X	Z	CN	CLM	CY	CYN	CBL	CA
900.740	-.058	-.01692	.00428	-.23608	.18987	-.05996	.17757
900.750	48.878	.03205	-.03318	-.24953	.19511	-.05745	.17714
900.740	99.639	.09952	-.08111	-.23915	.8246	-.05218	.17773
900.840	149.850	.18338	-.14068	-.21359	.16040	-.05166	.17346
900.720	200.230	.24633	-.18865	-.18979	.14065	-.05091	.16810
900.770	300.030	.27986	-.22199	-.17428	.12410	-.04753	.15975
900.760	400.280	.25608	-.19396	-.16073	.11675	-.03567	.15778
900.820	598.250	.08992	-.08244	-.06764	.04884	-.01350	.14110

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1A13 SOURCE DATA

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(RTJ161) (31 JUL 75)

1A13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

## REFERENCE DATA

SREF = 2690.0000 SG.FT. XPRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = .0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = .000  
Y = .000 PCMBR = 1500.000

RUN NO. 527/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
.428	49.995	-.07272	-.04259	-.26427	.02624	-.01224	.06673
.299	99.879	.04218	-.11010	-.33411	-.01062	-.00510	.08999
.381	150.030	.14734	-.11684	-.39290	-.04125	.00506	.11814
.382	200.320	.25732	-.11324	-.39329	-.06053	.01334	.13645
.315	300.330	.35586	-.08638	-.25134	-.05763	.01605	.13540
.134	400.060	.33810	-.06333	-.15143	-.05361	.00996	.13967
.220	601.890	.19409	.00057	-.07178	-.01691	-.00236	.12844
.317	801.280	.17922	-.03372	-.02962	-.00238	.00089	.13969
-.810	1000.100	.23240	-.10078	-.00761	-.00078	.00176	.16183

RUN NO. 525/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
300.540	.072	.08251	-.02120	-.17912	.00727	-.01393	.12366
300.330	51.724	-.01289	.00413	-.29065	.01703	-.00986	.13803
300.540	99.056	-.09551	.02496	-.38486	.02579	-.00216	.15818
300.420	147.840	-.04209	.02487	-.42134	.03077	.00303	.15358
300.500	200.250	.05903	.01608	-.40238	.02217	.00787	.14846
300.360	297.880	.15812	.00617	-.24584	.00185	.01091	.14006
300.370	399.990	.15798	.01314	-.15218	-.00327	.00443	.13532
300.350	600.000	.13912	-.00623	-.08728	.01274	-.00763	.13556
300.490	801.490	.19247	-.07942	-.03643	.01054	-.00260	.14573
299.610	1000.100	.26229	-.15721	-.01059	.00363	.00194	.17989

RUN NO. 517/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
600.690	51.181	.11121	-.05469	-.30300	.08737	-.02995	.14485
600.720	100.510	.02197	-.00118	-.39600	.11552	-.01672	.14566
600.640	149.130	.02438	-.00805	-.43742	.13025	-.00600	.13400
600.640	198.490	.07874	-.02745	-.42141	.12651	-.00276	.13387
600.630	298.750	.15460	-.04455	-.27541	.08629	.00318	.13695
600.390	397.510	.16541	-.04574	-.16604	.04623	.00017	.13682
600.540	600.220	.15306	-.04655	-.11001	.03940	-.01040	.14243
600.740	801.150	.23403	-.13961	-.04198	.02133	-.00284	.16946
599.840	999.690	.17522	-.12763	-.01044	.00544	.00000	.15850

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ161) (31 JUL 75)

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 518/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
900.840	49.829	.31086	-.19581	-.28443	.14275	-.05085	.16056
900.740	100.21~	.25247	-.16040	-.39494	.20423	-.04666	.15714
900.700	149.770	.22058	-.12318	-.44896	.25211	-.03331	.16147
900.820	199.440	.20290	-.12389	-.44207	.23986	-.02107	.15851
900.740	300.440	.21416	-.12780	-.30606	.16848	-.01154	.15085
900.850	400.970	.20161	-.11115	-.18713	.09941	-.00879	.15413
900.69~	599.970	.22362	-.12830	-.11210	.05835	-.01681	.16477
900.900	800.130	.24642	-.17965	-.03136	.02072	-.00056	.16359
900.840	999.590	.00478	-.01430	-.00260	.00111	.00049	.14492

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = .000 PCHEER = 1500.000

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ162) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 528/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
.262	90.056	-.10541	.03006	-.18470	.01317	-.02098	.15691
.258	100.470	-.09460	.02818	-.24490	.01821	-.02479	.14501
.209	151.170	-.03932	.01225	-.29437	.03158	-.03126	.12375
.203	201.030	.00636	.00091	-.29574	.01475	-.02214	.11946
.302	301.920	.08264	.01660	-.27353	-.01246	-.00887	.12602
.204	400.680	.08262	.02329	-.22509	-.01272	-.00713	.12909
.337	600.010	.11038	.00580	-.19545	.00197	-.00624	.15450
.396	799.980	.18219	-.04504	-.12691	.02326	-.00863	.16154
.350	998.830	.25106	-.12240	-.07828	.02824	-.00598	.16897

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 200.000 PCHEER = 1500.000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(PTJ162) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1952.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 200.000 PCMPR = 1500.000

RUN NO. 518/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
300.410	-1.124	-.07203	.02403	-.23244	.01195	-.03262	.16421
300.430	48.975	-.02343	.00999	-.27584	.02637	-.03402	.15114
300.470	99.930	.01120	.01104	-.30019	.03251	-.03392	.14641
300.370	149.570	.02139	.00721	-.29609	.02709	-.03068	.14477
300.360	199.120	.04051	.00153	-.30846	.02863	-.02849	.13836
300.440	300.670	.06849	-.00035	-.27415	.02084	-.01702	.13909
300.370	400.230	.07443	-.00259	-.25120	.02965	-.01583	.15084
300.410	600.180	.16769	-.06372	-.20769	.05427	-.01576	.15643
300.540	801.380	.25438	-.12745	-.13512	.05356	-.01525	.16609
299.530	1000.100	.25604	-.15256	-.07453	.04048	-.00794	.17229

RUN NO. 520/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
600.600	.063	-.07495	.03290	-.23069	.07828	-.04310	.15110
600.580	50.112	-.03019	.01060	-.22537	.05208	-.04100	.13890
600.630	100.240	.00103	.00076	-.21742	.04467	-.03668	.13875
600.620	149.890	.01326	-.00540	-.23490	.04707	-.03189	.14011
600.690	200.980	.03498	-.01343	-.26333	.05677	-.02970	.14052
600.630	301.680	.07699	-.02689	-.25044	.04645	-.01963	.13840
600.650	401.110	.10442	-.04091	-.23109	.05482	-.01927	.14229
600.780	600.000	.25674	-.15319	-.20937	.09483	-.02607	.16304
600.640	799.730	.27201	-.17510	-.12932	.07241	-.01088	.13365
600.690	999.090	.11495	-.08576	-.04829	.03100	-.00523	.15755

RUN NO. 521/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
900.760	1.169	-.00180	-.01207	-.15185	.08311	-.04262	.16119
900.750	50.086	.04173	-.03305	-.18490	.08087	-.03699	.14692
900.820	99.789	.06689	-.04738	-.19166	.08334	-.03492	.14572
900.780	149.890	.09918	-.05103	-.18862	.07763	-.03049	.14342
900.720	199.890	.11604	-.06660	-.22338	.08531	-.02911	.14830
900.870	297.840	.14416	-.08341	-.22171	.08045	-.02718	.14858
900.620	399.910	.19064	-.09977	-.21497	.09332	-.02644	.15498
900.820	601.520	.32304	-.21916	-.19675	.12161	-.03384	.15686
900.760	800.260	.17496	-.13592	-.07548	.05285	-.01042	.14811
900.800	999.7	-.01321	-.00258	-.00762	.00464	.00035	.14861

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM 08T10

(RTJ183) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. YMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRZF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 400.000 PCHMR = 1500.000

RUN NO. 528/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
.274	-1.286	-.15436	.04591	-.14052	-.00569	-.00987	.19544
.259	49.715	-.14121	.04238	-.17440	-.00041	-.01383	.19216
.271	99.643	-.13308	.04590	-.20650	.00818	-.01714	.18730
.304	149.570	-.12075	.04765	-.23352	.01657	-.01897	.18191
.177	199.010	-.10174	.04463	-.25164	.02174	-.01972	.17455
.195	298.980	-.06152	.04103	-.27309	.02837	-.01862	.16284
.229	399.070	-.01509	.03476	-.27714	.03650	-.01868	.16251
.268	599.590	.08013	-.00581	-.25518	.05748	-.02088	.16837
.374	800.950	.18131	-.07345	-.20001	.06461	-.01471	.17496
-.610	1000.100	.22925	-.13066	-.13514	.06008	-.01422	.17038

RUN NO. 524/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
300.450	.101	-.12485	.04911	-.19756	.05247	-.02729	.16730
300.460	50.150	-.12046	.04804	.00152	.06199	-.02919	.16848
300.440	100.300	-.09778	.03981	-.23530	.07263	-.02863	.16937
300.490	150.370	-.06953	.03069	-.24533	.08194	-.02733	.16860
300.310	200.470	-.04400	.02333	-.25824	.08913	-.02588	.16882
300.340	300.740	.00205	.00619	-.29735	.10390	-.02528	.16832
300.430	400.840	.04817	-.01164	-.30111	.11517	-.02684	.16615
300.460	600.570	.16056	-.07934	-.24104	.10236	-.02226	.17593
300.470	799.830	.24131	-.14383	-.18495	.09078	-.01920	.17441
300.550	999.000	.20002	-.13881	-.10595	.06264	-.02369	.16969

RUN NO. 523/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
600.470	-.251	-.09589	.04794	-.24076	.14380	-.04066	.18119
600.570	49.854	-.06458	.03028	-.25905	.15483	-.04201	.18250
600.590	99.904	-.03853	.01702	-.28023	.16497	-.04367	.18140
600.610	149.790	-.01028	.00214	-.29643	.17402	-.04062	.18041
600.540	199.770	.02006	-.01292	-.30330	.18000	-.03795	.18028
600.630	299.970	.08482	-.04847	-.31157	.18066	-.03156	.17973
600.540	399.960	.13480	-.08102	-.29736	.16645	-.02738	.18276
600.650	600.670	.24819	-.16496	-.21207	.12858	-.02537	.19321
600.650	800.330	.24804	-.18117	-.13889	.08927	-.03058	.16502
600.660	1000.100	.04086	-.03796	-.05545	.03747	-.00063	.15815

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IA13 SOURCE DATA

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IA13.SRB(58)WITH PLUMES SEPARATING FROM 09T10

(RTJ163) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 400.000 PCMR = 1500.000

RUN NO. 522/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
900.750	.129	-.04956	.01888	-.24368	.17867	-.05423	.17617
900.830	50.868	-.00582	-.00895	-.24985	.18423	-.07988	.17934
900.810	100.160	.03901	-.03759	-.24982	.18717	-.04842	.17884
900.710	150.310	.08488	-.07492	-.24814	.18386	-.04887	.17791
900.740	200.270	.14819	-.11225	-.25368	.18656	-.04754	.17738
900.700	299.980	.20503	-.15654	-.26294	.18953	-.04542	.17017
900.790	399.830	.23131	-.16838	-.20472	.14232	-.03090	.16759
900.670	599.560	.23957	-.18609	-.11643	.08473	-.03216	.15419
900.710	800.040	.03079	-.03582	-.05100	.03647	-.00267	.14671
900.750	999.950	-.04848	.02232	-.00253	.00120	.00045	.15078

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 800.000 PCMR = 1500.000

IA13.SRB(58)WITH PLUMES SEPARATING FROM 09T10

(RTJ164) ( 31 JUL 75 )

RUN NO. 529/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
-.571	799.960	.11394	-.08488	-.16251	.10455	-.02062	.18036

RUN NO. 530/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
300.430	799.580	.06825	-.06533	-.08282	.05972	-.01929	.16595

RUN NO. 531/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
800.820	800.220	-.04473	.01829	-.00525	.00301	-.00420	.16105

RUN NO. 532/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
900.810	800.060	-.05836	.02056	-.00042	.00067	.00011	.16152

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(RTJ165) ( 31 JUL 75 )

1A13.998(S8)WITH PLUMES SEPARATING FROM 09T10

## REFERENCE DATA

SREF = 2600.0000 SQ.FT. XREF = 1052.0000 IN. XT  
 LREF = 1200.3000 INCHES YREF = .0000 IN. YT  
 BREF = 1200.3000 INCHES ZREF = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 26.800  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 800.000 PCHEER = 1500.000

RUN NO. 533/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CEL	CA
-646	800.130	.12625	-.08650	-.16595	.10524	-.02273	.18404

RUN NO. 534/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CEL	CA
300.440	799.530	.12010	-.09942	-.11817	.08012	-.02408	.17138

RUN NO. 535/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CEL	CA
600.640	800.150	-.02043	-.00058	-.02521	.01771	-.00669	.15793

RUN NO. 536/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CEL	CA
900.620	300.210	-.05663	.02985	-.00950	-.00070	.00008	.18174

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IA13 SOURCE DATA

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IA13.SR8(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ188) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
Y = 400.000 PCMPBR = 1500.000

RUN NO. 537/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
.290	.039	-.14528	.04009	-.12983	.00163	-.01347	.19921
.361	49.923	-.13973	.04060	-.15494	.00399	-.01507	.19714
.297	99.944	-.12911	.03948	-.18109	.00387	-.01620	.19529
.312	149.863	-.12052	.03986	-.20692	.00529	-.01758	.19210
.367	199.400	-.13113	.05434	-.24047	.01735	-.01859	.18534
.206	298.780	-.111053	.05725	-.29275	.03448	-.02080	.17054
.265	398.360	-.05390	.04910	-.30709	.03582	-.01948	.16097
.215	600.150	.05569	.01491	-.26917	.04569	-.01602	.16533
.325	801.180	.17425	-.05613	-.19158	.06003	-.01311	.17005
-.681	1000.400	.24619	-.13485	-.12680	.05587	-.00987	.16745

RUN NO. 538/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
300.610	1.073	-.13120	.04950	-.18326	.04142	-.02391	.17085
300.410	50.174	-.12700	.04820	-.20776	.04882	-.02565	.17188
300.500	100.410	-.11209	.04340	-.22597	.05778	-.02603	.17239
300.470	150.420	-.09300	.03766	-.24199	.06649	-.02544	.17137
300.430	200.380	-.06896	.03118	-.25634	.07501	-.02510	.17052
300.510	300.980	-.01892	.01584	-.29659	.09329	-.02715	.16967
300.500	400.900	.03984	-.00555	-.30532	.10021	-.02883	.16811
300.460	600.960	.15113	-.06408	-.25971	.09541	-.02035	.17287
300.440	799.850	.24111	-.13501	-.17606	.08146	-.01340	.16821
300.520	998.870	.23513	-.15871	-.10582	.06217	-.02456	.17193

RUN NO. 539/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
600.640	-.161	-.11159	.05686	-.22880	.12601	-.03685	.18093
600.520	49.952	-.08107	.03809	-.24021	.13328	-.03768	.17995
600.590	100.000	-.04923	.02256	-.26342	.15119	-.03986	.18113
600.520	150.000	-.02574	.01171	-.29200	.16979	-.04000	.18171
600.560	199.660	-.00304	.00173	-.30965	.17995	-.03989	.17955
600.660	299.880	.05058	-.02704	-.31881	.18073	-.03643	.17755
600.480	399.740	.11968	-.06894	-.30246	.16316	-.03166	.17976
600.660	600.630	.23072	-.14347	-.23613	.12847	-.02312	.17698
600.590	800.650	.25634	-.17868	-.14958	.09222	-.02412	.16731
600.630	999.500	.06497	-.05408	-.05564	.03694	-.00234	.15719



1A13, S78(S8) WITH PLUMES SEPARATING FROM 09T10

(RTJ186) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 400.000 PCMBR = 1500.000

RUN NO. 540/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN	CBL	CA
900.640	1.191	-.07189	-.03655	-.25137	.18315	-.05445	.17946
900.740	50.402	-.03228	.01023	-.25116	.18206	-.04963	.18007
900.680	100.390	.00787	-.01734	-.25067	.18076	-.04671	.17970
900.780	150.410	.05088	-.04710	-.25644	.18295	-.04604	.17910
900.620	200.220	.09466	-.07697	-.26631	.18887	-.04700	.17857
900.570	300.250	.16189	-.12109	-.28959	.20654	-.04633	.17407
900.690	399.780	.21950	-.15844	-.22389	.16049	-.03980	.16860
900.800	599.840	.24719	-.18354	-.15994	.11024	-.02636	.16124
900.780	799.720	.07974	-.07011	-.06604	.04631	-.00638	.14718
900.770	999.980	-.04027	-.01626	-.00346	.00167	.00047	.15701

1A13, S78(S8) WITH PLUMES SEPARATING FROM 09T10

(RTJ167) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 400.000 PCMBR = 1500.000

RUN NO. 541/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
.246	200.280	.15692	-.06872	-.53141	.04726	-.02691	.10293
.323	300.210	.44406	-.18110	-.31930	-.02827	.00041	.14382
.093	400.140	.43320	-.14838	-.17463	-.03800	.00759	.14411
.348	601.150	.34319	-.13564	-.08784	-.01431	.00593	.12998
.325	801.010	.28491	-.12130	-.02916	-.01292	.00267	.11471
-.759	1000.200	.23674	-.10307	-.02047	-.00148	.00001	.14218

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ187) (31 JUL 75)

1A13, SRB(SB) WITH PLUMES SEPARATING FROM ORTIO

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = .000 PCWGR = 1500.000

RUN NO. 543/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
300.590	99.949	-.08148	.01496	-.35764	.02217	-.00329	.14851
300.620	147.900	-.06041	.01801	-.40634	.01982	.00595	.14628
300.400	200.310	.04158	.01057	-.41256	.01609	.01015	.14359
300.520	300.230	.14941	.01032	-.26565	.00197	.01223	.13821
300.430	400.140	.15473	.01894	-.15740	-.00760	.00595	.13271
300.390	600.020	.11679	.00843	-.08543	.00570	-.00441	.12923
300.450	801.320	.19010	-.07615	-.04817	.00895	-.00177	.13143
299.520	1000.200	.25693	-.14978	-.02610	.00783	.00024	.15602

RUN NO. 545/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
600.550	149.290	-.00207	-.00529	-.43326	.12154	-.00550	.12531
600.510	198.230	.05647	-.01948	-.44585	.13046	-.00308	.12438
600.370	298.390	.13982	-.03943	-.30566	.08805	.00281	.13113
600.700	400.110	.15899	-.03944	-.17020	.04246	.00250	.13492
600.480	600.090	.11812	-.02476	-.10846	.03295	-.00922	.13691
600.660	801.370	.22508	-.13328	-.05378	.02298	-.00395	.14075
599.640	1000.100	.21954	-.15624	-.02959	.01704	-.00378	.15941

RUN NO. 548/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
900.680	199.570	.17478	-.10322	-.45387	.24035	-.01849	.15710
900.520	299.020	.19615	-.11594	-.34053	.17749	-.01224	.14455
900.870	400.190	.19044	-.10248	-.19151	.09679	-.00574	.14700
900.640	600.020	.15388	-.07613	-.10963	.05537	-.01559	.15819
900.830	800.460	.24432	-.17188	-.04634	.02950	-.00323	.16332
899.800	1000.100	.02624	-.02963	-.01510	.01000	.00020	.14484

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(RTJ168) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 200.000 PCMRBR = 1500.000

RUN NO. 542/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
323	199.910	-.05211	.03158	-.33006	.05474	-.03777	.11970
288	302.310	.06610	.01368	-.34506	.05017	-.03184	.12137
280	400.790	.09098	.01020	-.27234	.02294	-.01817	.12202
380	800.680	.12741	.00739	-.18935	.00038	-.00320	.14207
502	800.050	.17338	-.03584	-.10691	.01509	-.00588	.14930
344	998.960	.25144	-.11709	-.07715	.02384	-.00600	.15743

RUN NO. 544/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
300.300	100.210	.01285	.00768	-.28319	.02680	-.03108	.14788
700.360	150.350	.02930	.00190	-.27965	.02275	-.02908	.14396
300.380	200.440	.05118	-.00615	-.27581	.01926	-.02302	.13436
300.450	301.580	.08797	-.00645	-.24421	.00624	-.01154	.12738
300.380	399.500	.07200	.00171	-.24641	.01677	-.01167	.14776
300.600	800.910	.15709	-.04454	-.19712	.04489	-.01367	.14471
300.470	799.730	.28933	-.10525	-.11945	.04363	-.01389	.15657
300.530	1000.100	.27556	-.17453	-.08152	.04141	-.00746	.15903

RUN NO. 546/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
600.750	50.407	-.04570	.01791	-.22715	.04759	-.04242	.14468
600.630	100.070	-.02111	.00710	-.21791	.03782	-.03626	.14633
600.570	149.010	.00101	-.00536	-.23127	.04277	-.03049	.14184
600.490	198.220	.03237	-.01237	-.25909	.05140	-.02770	.13904
600.430	98.940	.08664	-.02243	-.24992	.04087	-.01722	.13371
600.500	400.080	.08292	-.03204	-.23014	.04378	-.01600	.14039
600.570	800.370	.22935	-.12758	-.19988	.08061	-.02046	.14845
600.710	801.090	.26609	-.16767	-.11913	.06362	-.01145	.15626
599.620	1000.100	.15322	-.11361	-.06087	.03878	-.00859	.15643

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ168) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1200.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 547/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
900.950	1.447	-.03957	.01036	-.15882	.08008	-.04095	.16293
900.823	50.599	.01064	-.01579	-.18260	.07245	-.03409	.14333
900.720	100.070	.03795	-.03259	-.18796	.07343	-.03209	.14134
900.650	149.920	.07129	-.04017	-.18324	.07020	-.02699	.13721
900.680	198.760	.08660	-.05298	-.21518	.07440	-.02542	.14189
900.440	297.770	.12149	-.07230	-.22014	.07684	-.02352	.14179
900.650	400.050	.14484	-.07594	-.20087	.07273	-.01885	.14906
901.050	802.270	.30581	-.19778	-.19814	.11004	-.03305	.15789
900.760	800.420	.21293	-.15680	-.07592	.05179	-.00855	.15707
899.770	1000.200	.00123	-.01268	-.01367	.00878	.00032	.14327

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 200.000 PCFMR = 1500.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1200.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 549/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
.159	599.810	.65134	-.38144	-.16084	.03737	-.03932	.12720
.286	601.350	.59250	-.34983	-.10793	.03134	-.02025	.07328
-.759	1000.600	.53439	-.33558	-.05597	.01695	-.01207	.04103

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = .000 PCFMR = 1500.000

RUN NO. 550/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
300.050	600.260	.08422	.03865	-.11319	.01688	-.00895	.11141
300.570	800.230	.17883	-.06485	-.04175	-.00142	-.00238	.10545
300.400	999.380	.23629	-.12417	-.03212	.00718	-.00152	.11239

RUN NO. 551/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CBL	CA
600.300	600.260	.08854	.00826	-.08671	.00811	-.00133	.14186
600.850	801.250	.18695	-.09568	-.05427	.01694	-.00728	.12961
600.700	999.730	.24550	-.15928	-.03603	.01681	-.00017	.14415

DATE 02 AUG 75

1A13 SOURCE DATA

(RTJ16R) ( 31 JUL 75 )

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 552/ 0 RN/L = 1.75

X Z CN CLM CY CYN CBL CA  
 900.870 800.250 .08658 -.03064 -.08820 .03131 -.00708 .14791  
 900.780 800.240 .22385 -.15069 -.05927 -.03331 -.00784 .12827  
 900.740 999.150 .14417 -.11080 -.03088 .01989 -.00432 .14931

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = .000 PCHMR = 1500.000

(RTJ170) ( 31 JUL 75 )

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 555/ 0 RN/L = 1.75

X Z CN CLM CY CYN CBL CA  
 .370 600.220 .49800 -.29417 -.30656 .07548 -.09155 .12150  
 .286 799.970 .43026 -.25142 -.19924 .05499 -.03624 .11005  
 .320 999.460 .33699 -.19449 -.11951 .03593 -.00908 .10830

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = 200.000 PCHMR = 1500.000

RUN NO. 554/ 0 RN/L = 1.75

X Z CN CLM CY CYN CBL CA  
 300.340 600.430 .07877 .00378 -.19159 .03151 -.00631 .13563  
 300.380 801.130 .18032 -.07122 -.13195 .03496 -.01119 .13656  
 300.540 1001.400 .25867 -.14818 -.09900 .03860 -.00713 .13960

RUN NO. 554/ 0 RN/L = 1.75

X Z CN CLM CY CYN CBL CA  
 800.720 600.150 .19432 -.09597 -.19493 .06698 -.01500 .14117  
 601.020 800.770 .24203 -.14566 -.13053 .05924 -.01494 .14674  
 600.660 999.140 .22627 -.15849 -.09158 .05308 -.01469 .14470

RUN NO. 553/ 0 RN/L = 1.75

X Z CN CLM CY CYN CBL CA  
 800.430 800.280 .17941 -.10224 -.18139 .06981 -.02297 .14549  
 900.720 800.890 .23347 -.16268 -.10598 .07021 -.01167 .16209  
 900.760 999.890 .07437 -.06402 -.04484 .03299 -.00432 .14708

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = 200.000 PCHMR = 1500.000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SR8(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ171) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 557/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
.202	600.310	.14375	-.05197	-.30222	.07485	-.04687	.15207
.438	800.860	.21645	-.09827	-.22372	.07429	-.03771	.15054
.282	999.700	.22316	-.11195	-.14994	.05649	-.01024	.15329

RUN NO. 558/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
300.350	600.000	.09820	-.01935	-.24684	.08289	-.01692	.17212
300.400	800.040	.20399	-.10124	-.18501	.07859	-.01294	.16686
300.430	998.950	.22485	-.14495	-.13436	.07142	-.01805	.15745

RUN NO. 559/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
600.540	600.730	.17916	-.10117	-.23186	.11501	-.01790	.17122
600.580	801.130	.24676	-.16658	-.16312	.09511	-.01722	.15754
600.600	999.180	.15340	-.11928	-.09095	.05915	-.01867	.15050

RUN NO. 560/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
900.750	599.500	.21678	-.15032	-.18192	.11747	-.01744	.16670
900.660	799.510	.17525	-.14006	-.09674	.06778	-.02222	.15104
800.870	1000.200	-.01085	-.00518	-.02175	.01478	-.00119	.15089

1A13.SR8(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ172) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 561/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CBL	CA
-.819	600.550	.12761	-.07694	-.21419	.12023	-.02283	.18552

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 400.000 PCWBR = 1500.000

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 800.000 PCWBR = 1500.000

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DATE 02 AUG 75 1A13 SOURCE DATA

1A13,SR8(SB)WITH PLUMES SEPARATING FROM 09T10 (RTJ172) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 562/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN	CA
300.300	799.620	.14484	-.11013	-.13934	.09099	.17346

RUN NO. 563/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CA
600.510	799.970	.02875	-.03779	-.05014	.03567	.15652

RUN NO. 564/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN	CA
800.600	800.410	-.05613	.02708	-.00196	.00039	.15950

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 800.000 PCHMBR = 1500.000

1A13,SR8(SB) W/O PLUMES SEPARATING FROM 09T10 (RTJ173) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 565/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CA
.316	.269	-.06947	.03628	-.00370	-.00454	.17379
.270	50.152	-.06846	.03591	-.00383	-.00374	.17412
.277	99.967	-.05557	.03485	-.00522	-.00234	.17430
.468	149.240	-.05096	.03220	-.00628	-.00161	.17450
.416	200.000	-.05555	.02959	-.00750	-.00120	.17522
.209	301.230	-.05576	.03048	-.00738	.00075	.17335
.104	401.520	-.05052	.03108	-.00134	.00012	.17296
.223	600.210	-.06551	.03392	.00197	-.00189	.17309

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = 5.000  
Y = .000 PCHMBR = .000

DATE 02 AUG 75 1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10 (RTJ173) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 568/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN	CBL	CA
900.810	.455	-.06137	.03009	-.00654	.00376	.00023	.17315
900.750	50.232	-.06380	.03271	-.00523	.00283	.00083	.17350
900.720	100.250	-.06285	.03203	-.00464	.00262	.00085	.17335
900.640	150.270	-.06218	.03141	-.00314	.00184	.00079	.17305
900.700	200.380	-.06313	.03199	-.00056	.00014	.00072	.17298
900.590	300.850	-.06555	.03388	.00202	-.00190	.00057	.17280
901.010	397.730	-.06554	.03385	.00212	-.00193	.00058	.17291
900.650	600.330	-.06557	.03388	.00201	-.00191	.00057	.17315

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = 5.000  
 Y = .000 PCHMBR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 566/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
.152	-1.195	-.06341	.03215	-.00800	.00400	.00040	.17421
.219	50.470	-.06223	.03138	-.00662	.00308	.00041	.17434
.269	100.470	-.06033	.02992	-.00571	.00277	-.00004	.17437
.271	150.380	-.05982	.02939	-.00504	.00253	-.00034	.17402
.228	200.380	-.06135	.03054	-.00347	.00169	-.00001	.17350
.342	300.280	-.06418	.03255	-.00048	-.00007	.00070	.17310
.372	399.600	-.06614	.03397	.00189	-.00182	.00057	.17312
.498	599.110	-.06627	.03406	.00201	-.00189	.00056	.17336

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = 5.000  
 Y = 200.000 PCHMBR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10 (RTJ174) ( 31 JUL 75 )



1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ174) ( 31 JUL 75 )

## REFERENCE DATA

SF F = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 589/ 0 RN/L = 8.59

X	Z	CN	CLM	CY	CYN	CBL	CA
900.690	-0.943	-0.0570	.03391	.00204	-0.00190	.00057	.17301
900.820	49.740	-0.0570	.03392	.00208	-0.00191	.00057	.17303
900.700	99.704	-0.0567	.03391	.00204	-0.00190	.00057	.17308
900.710	149.790	-0.0560	.03389	.00208	-0.00191	.00057	.17299
900.820	199.830	-0.0552	.03385	.00203	-0.00190	.00057	.17287
900.750	299.730	-0.0556	.03392	.00211	-0.00192	.00058	.17325
900.690	400.480	-0.0570	.03393	.00206	-0.00191	.00058	.17330
900.510	601.830	-0.0555	.03387	.00211	-0.00192	.00058	.17299

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = 5.000  
 Y = 200.000 PCMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 587/ 0 RN/L = 8.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.183	.011	-0.06497	.03306	.00149	-0.00135	.00017	.17332
.273	50.035	-0.06493	.03298	.00144	-0.00135	.00009	.17351
.210	99.985	-0.06507	.03307	.00158	-0.00148	.00013	.17334
.131	149.970	-0.06573	.03381	.00164	-0.00174	.00038	.17321
.157	200.140	-0.06620	.03402	.00200	-0.00189	.00056	.17321
.184	300.110	-0.06621	.03402	.00194	-0.00188	.00056	.17331
.252	399.920	-0.06620	.03403	.00204	-0.00190	.00057	.17337
.319	599.920	-0.06621	.03403	.00197	-0.00188	.00056	.17332

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = 5.000  
 Y = 400.000 PCMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ175) ( 31 JUL 75 )

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SR8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ175) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 570/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
900.730	- .092	-.06594	.03389	.00208	-.00191	.00058	.17310
900.710	48.655	-.06573	.03393	.00208	-.00192	.00058	.17333
900.680	99.467	-.06567	.03391	.00209	-.00192	.00058	.17316
900.630	149.610	-.06565	.03392	.00203	-.00190	.00057	.17323
900.800	199.300	-.06563	.03389	.00205	-.00191	.00058	.17313
900.700	293.800	-.06564	.03388	.00210	-.00192	.00058	.17314
900.770	400.470	-.06557	.03387	.00207	-.00191	.00058	.17308
901.040	598.720	-.06563	.03390	.00209	-.00192	.00058	.17319

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = 5.000  
 Y = 400.000 PCMR = .000

## REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 575/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
.256	-.279	-.05370	.02562	-.02869	.01253	-.00084	.17487
.380	49.653	-.05127	.02435	-.02519	.01104	-.00072	.17513
.293	99.618	-.04958	.02327	-.02018	.00917	-.00072	.17461
.338	149.530	-.05014	.02348	-.01637	.00821	-.00071	.17377
.452	199.880	-.05314	.02526	-.01194	.00631	-.00043	.17301
.401	300.110	-.06115	.03105	-.00361	.00175	.00083	.17230
.518	399.820	-.06366	.03230	.00017	-.00051	.00065	.17252
.269	600.180	-.06591	.03398	.00198	-.00186	.00056	.17287

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -5.000  
 Y = 200.000 PCMR = .000

1A13 SR8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ176) ( 31 JUL 75 )

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ176) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 571/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
900.690	.059	-.06584	.03394	.00187	-.00187	.00058	.17203
900.740	50.165	-.06589	.03399	.00197	-.00188	.00057	.17229
906.500	100.070	-.06595	.03402	.00199	-.00189	.00057	.17269
900.730	150.070	-.06598	.03403	.00196	-.00187	.00057	.17288
900.640	200.140	-.06594	.03401	.00202	-.00189	.00057	.17292
900.620	299.780	-.06592	.03402	.00199	-.00188	.00057	.17321
900.720	399.290	-.06603	.03405	.00199	-.00189	.00057	.17324
900.620	600.180	-.06596	.03403	.00200	-.00186	.00056	.17326

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = -5.000  
Y = 200.000 PCHBR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ177) ( 31 JUL 75 )

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = -5.000  
Y = 400.000 PCHBR = .000

RUN NO. 578/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
.369	.102	-.06312	.03182	-.00019	-.00001	-.00005	.17311
.233	50.165	-.06303	.03170	.00012	-.00024	-.00019	.17305
.346	100.170	-.06323	.03178	.00068	-.00070	-.00026	.17278
.314	150.110	-.06419	.03249	.00139	-.00135	-.00037	.17240
.155	200.170	-.06577	.03378	.00191	-.00182	.00046	.17240
.258	300.110	-.06594	.03399	.00196	-.00187	.00056	.17278
.123	400.120	-.06605	.03403	.00195	-.00187	.00056	.17295
.309	599.680	-.06595	.03399	.00199	-.00187	.00056	.17292

DATE 02 AUG 75

1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ177) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 572/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
900.510	.162	-.06591	.03400	.00198	-.00188	.00057	.17315
900.570	50.201	-.06591	.03401	.00196	-.00188	.00057	.17314
900.660	99.986	-.06592	.03401	.00200	-.00188	.00056	.17318
900.830	149.970	-.06594	.03401	.00199	-.00188	.00057	.17318
900.610	200.010	-.06596	.03403	.00198	-.00187	.00056	.17324
900.570	300.420	-.06598	.03402	.00199	-.00189	.00057	.17315
900.580	399.570	-.06587	.03398	.00202	-.00189	.00057	.17300
900.560	600.140	-.06598	.03402	.00201	-.00188	.00056	.17322

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = -5.000  
Y = 400.000 PCMR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 574/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
.307	399.940	-.05614	.02874	-.00241	.00058	.00078	.17284
.139	600.230	-.06594	.03399	.00193	-.00186	.00057	.17265

RUN NO. 573/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CBL	CA
900.600	398.040	-.06598	.03400	.00202	-.00188	.00056	.17296
900.670	600.090	-.06598	.03398	.00201	-.00188	.00057	.17304

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = -5.000  
Y = .000 PCMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ178) ( 31 JUL 75 )

ORIGINAL PAGE IS  
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DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ179) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -10.000  
 Y = 400.000 PCMR = .000

RUN NO. 577/ 0 RM/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.302	-1.178	-.05925	.02873	-.00459	.00329	-.00082	.17264
.258	49.870	-.06094	.03010	-.00313	.00214	-.00043	.17255
.415	99.807	-.06136	.03039	-.00196	.00129	-.00043	.17227
.326	149.880	-.06237	.03105	-.00065	.00025	-.00032	.17205
.476	199.860	-.06462	.03281	.00098	-.00108	.00021	.17228
.492	299.840	-.06593	.03394	.00191	-.00185	.00056	.17238
.594	400.090	-.06596	.03399	.00198	-.00186	.00055	.17277
.093	600.230	-.06597	.03399	.00190	-.00184	.00055	.17285

RUN NO. 582/ 0 RM/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.520	.135	-.06549	.03365	.00194	-.00186	.00056	.17234
900.720	50.113	-.06549	.03364	.00194	-.00186	.00056	.17242
900.640	100.150	-.06550	.03365	.00194	-.00186	.00055	.17244
900.720	149.850	-.06550	.03354	.00195	-.00187	.00056	.17238
900.690	200.020	-.06554	.03367	.00197	-.00186	.00056	.17248
900.650	300.340	-.06556	.03368	.00200	-.00187	.00056	.17256
900.380	400.030	-.06556	.03367	.00195	-.00185	.00055	.17240
900.450	599.950	-.06556	.03367	.00196	-.00186	.00055	.17248

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -10.000  
 Y = 200.000 PCMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ180) ( 31 JUL 75 )

RUN NO. 578/ 0 RM/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.485	199.930	-.04299	.01925	-.00196	.00965	-.00103	.17324
.548	300.750	-.05576	.02769	-.00887	.00481	.00102	.17208
.214	399.900	-.06176	.03104	-.00116	.00040	.00074	.17202
.070	600.100	-.06569	.03394	.00196	-.00187	.00056	.17267

DATE 02 JUL 75

IA13 SOURCE DATA

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IA13 SR8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ180) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = -10.000  
Y = 200.000 PCMR = .000

RUN NO. 581/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.670	.430	-.06545	.03353	.00208	-.00198	.00053	.17112
900.640	50.010	-.06553	.03362	.00206	-.00194	.00055	.17133
900.670	100.100	-.06552	.03381	.00201	-.00190	.00056	.17133
900.630	150.010	-.06548	.03362	.00196	-.00186	.00055	.17159
900.480	199.010	-.06551	.03363	.00198	-.00187	.00056	.17189
900.510	299.610	-.06555	.03366	.00193	-.00185	.00055	.17235
900.600	398.950	-.06551	.03367	.00195	-.00186	.00055	.17256
900.490	600.210	-.06558	.03369	.00195	-.00186	.00056	.17261

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = -10.000  
Y = 200.000 PCMR = .000

IA13 SR8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ181) ( 31 JUL 75 )

RUN NO. 579/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.190	399.820	-.05160	.02659	-.00300	.00065	.00080	.17266
.059	600.190	-.06562	.03370	.00189	-.00181	.00056	.17244

RUN NO. 580/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.700	399.850	-.06553	.03368	.00193	-.00185	.00055	.17218
900.520	600.060	-.06557	.03369	.00194	-.00185	.00056	.17250

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OF POOR QUALITY

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBTIG

(RTJ182) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 587/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
.354	399.940	-.04753	.02216	-.00756	.00422	.00100	.17136
.520	599.880	-.06544	.03381	.00197	-.00187	.00057	.17172

RUN NO. 583/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
900.370	.803	-.05921	.02812	-.00685	.00497	-.00040	.16799
900.260	50.596	-.06381	.03234	-.00409	.00285	.00084	.16928
900.230	100.070	-.06417	.03297	-.00129	.00065	.00370	.17003
900.210	149.980	-.06507	.03327	.00142	-.00141	.00059	.17067
899.830	199.960	-.06540	.03359	.00210	-.00198	.00055	.17115
899.800	299.730	-.06552	.03363	.00196	-.00186	.00056	.17165
900.770	399.940	-.06562	.03368	.00194	-.00186	.00055	.17235
899.250	600.420	-.06553	.03366	.00194	-.00186	.00056	.17244

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBTIG

(RTJ183) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 588/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CBL	CA
.538	299.840	-.05708	.02732	-.00574	.00389	.00092	.17036
.039	399.960	-.06563	.03368	.00203	-.00191	.00056	.17159
-.610	600.230	-.06554	.03365	.00193	-.00185	.00055	.17207

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = -20.000  
Y = 200.000 PCMR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = -20.000  
Y = 400.000 PCMR = .000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ183) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRPF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 584/ 0 RN/L = 8.81

X	Z	CN	CLM	CY	CYN	CBL	CA
900.120	.135	-.06502	.03269	.00185	-.00178	.00036	.16955
900.730	49.707	-.06567	.03340	.00204	-.00188	.00056	.17034
900.720	99.835	-.06563	.03357	.00208	-.00190	.00057	.17140
900.730	150.030	-.06557	.03366	.00207	-.00188	.00056	.17202
900.820	200.000	-.06552	.03366	.00203	-.00187	.00056	.17221
901.050	300.570	-.06549	.03364	.00204	-.00188	.00056	.17226
900.600	400.470	-.06549	.03365	.00204	-.00187	.00056	.17226
900.000	599.790	-.06552	.03366	.00204	-.00187	.00056	.17231

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -20.000  
 Y = 400.000 PCHMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRPF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 585/ 0 RN/L = 8.80

X	Z	CN	CLM	CY	CYN	CBL	CA
.019	399.790	-.06247	.02429	-.00137	-.00120	.00070	.17280
-.684	600.100	-.06228	.03128	.00147	-.00150	.00059	.17175

RUN NO. 585/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.810	399.900	-.06557	.03363	.00199	-.00186	.00056	.17156
899.180	600.380	-.06553	.03366	.00107	-.00187	.00056	.17228

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -20.000  
 Y = 400.000 PCHMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ184) ( 31 JUL 75 )



REFERENCE DATA

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT

LREF = 1290.3000 INCHES YMRP = .0000 IN. YT

BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT

SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000

AHA = .000 BETA = .000

DALPHA = -5.000 DBETA = 5.000

Y = .000 PCHGR = .000

RUN NO. 599/ 0 RN/L = 6.63									
X	Z	CN	CLM	CY	CYN	CBL	CA		
.237	50.044	-.06108	.02889	-.01233	.00037	-.00229	.17367		
.224	99.533	-.06196	.03048	-.01357	.00055	-.00157	.17376		
.162	148.650	-.05903	.02953	-.01626	.00143	-.00189	.17399		
.240	200.230	-.05516	.02887	-.01933	.00262	-.00192	.17422		
.254	300.010	-.04092	.02154	-.01833	.00413	-.00276	.17383		
.203	402.050	-.05392	.02776	-.00844	.00350	.00101	.17195		
.437	601.120	-.06481	.03306	.00169	-.00166	.00057	.17184		
.354	800.420	-.06565	.03371	.00192	-.00184	.00056	.17222		
.222	1000.000	-.06569	.03371	.00186	-.00184	.00055	.17223		

REFERENCE DATA

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT

LREF = 1290.3000 INCHES YMRP = .0000 IN. YT

BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT

SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000

ALPHA = .000 BETA = .000

DALPHA = -5.000 DBETA = 5.000

Y = 200.000 PCHGR = .000

RUN NO. 590/ 0 RN/L = 6.63									
X	Z	CN	CLM	CY	CYN	CBL	CA		
.216	50.382	-.06044	.02892	-.01017	.00594	-.00081	.17389		
.426	100.460	-.05799	.02811	-.00917	.00503	-.00081	.17372		
.234	150.250	-.05660	.02704	-.00830	.00455	-.00098	.17307		
.375	200.110	-.05695	.02722	-.00693	.00381	-.00086	.17273		
.386	300.150	-.06248	.03158	-.00332	.00162	.00074	.17186		
.254	399.600	-.06408	.03250	.00010	-.00050	.00063	.17183		
.266	599.190	-.06566	.03369	.00188	-.00184	.00055	.17209		
.369	799.550	-.06558	.03364	.00186	-.00184	.00055	.17193		
.355	1000.000	-.06564	.03367	.00185	-.00183	.00054	.17203		

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM ORBIT

(RTJ187) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -9.000 DBETA = 5.000  
Y = .000 PCMBR = .000

RUN NO. 591/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
.013	48.982	-.06117	.02902	-.01213	.00036	-.00233	.17412
.255	99.591	-.07210	.03068	-.01323	.00050	-.00160	.17414
.253	148.760	-.05925	.02972	-.01604	.00139	-.00190	.17448
.354	200.210	-.05586	.02930	-.01872	.00237	-.00192	.17479
.253	300.000	-.04140	.02201	-.01827	.00404	-.00278	.17452
.210	402.150	-.05403	.02803	-.00841	.00387	.00101	.17259
.502	601.120	-.06512	.03328	.00179	-.00167	.00056	.17258
.396	800.510	-.06594	.03395	.00202	-.00188	.00055	.17274
.235	1000.100	-.06591	.03353	.00295	-.00198	.00054	.17267

RUN NO. 594/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
900.650	.650	-.05089	.02085	-.00912	.00578	-.00236	.17310
900.620	50.322	-.06075	.02909	-.00792	.00475	.00003	.17269
900.590	100.310	-.05382	.03233	-.00733	.00442	.00086	.17307
900.680	150.460	-.06258	.03191	-.00675	.00425	.00092	.17270
900.650	200.600	-.05184	.03078	-.00437	.00284	.00084	.17240
900.670	300.180	-.06560	.03351	.00179	-.00165	.00057	.17225
900.690	400.190	-.06616	.03391	.00210	-.00191	.00055	.17275
900.680	601.170	-.06614	.03391	.00213	-.00191	.00055	.17303
900.770	801.210	-.06614	.03390	.00215	-.00192	.00055	.17281
900.650	999.910	-.06618	.03392	.00210	-.00191	.00055	.17296

1A13 SR8(S8) W/O PLUMES SEPARATING FROM OST10

(RTJ188) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 592/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.142	50.339	-.06071	.03020	-.01031	.00608	-.00063	.17448
.292	100.530	-.05021	.02838	-.00922	.00507	-.00080	.17423
.285	150.350	-.05673	.02724	-.00839	.00463	-.00100	.17378
.400	200.250	-.05702	.02738	-.00692	.00378	-.00087	.17329
.429	300.220	-.06269	.03182	-.00324	.00163	.00072	.17247
.284	399.740	-.06407	.03261	.00016	-.00047	.00063	.17218
.232	599.130	-.05587	.03394	.00205	-.00188	.00055	.17266
.353	799.490	-.06592	.03394	.00203	-.00187	.00055	.17274
.301	999.980	-.06554	.03395	.00198	-.00188	.00054	.17282

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = 5.000  
 Y = 200.000 PCAMBR = .000

RUN NO. 595/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.580	- .909	-.06199	.03021	.00159	-.00145	-.00093	.17257
900.570	49.837	-.06626	.03392	.00209	-.00190	.00055	.17269
900.570	89.820	-.06620	.03390	.00209	-.00191	.00055	.17268
900.700	149.960	-.06624	.03393	.00211	-.00191	.00055	.17282
900.640	200.060	-.06610	.03387	.00209	-.00190	.00055	.17269
900.700	300.330	-.06613	.03389	.00215	-.00192	.00056	.17288
900.740	400.960	-.06613	.03391	.00212	-.00192	.00055	.17299
900.770	601.240	-.06613	.03390	.00214	-.00191	.00055	.17284
900.550	798.400	-.06614	.03389	.00213	-.00191	.00055	.17278
900.600	999.130	-.06620	.03391	.00214	-.00192	.00056	.17284

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1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 08T10

(RTJ189) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2090.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = 5.000  
 Y = 400.000 PCMBR = .000

RUN NO. 593/ 0 RN/L = 8.85

X	Z	CN	CLM	CY	CYN	CBL	CA
.219	.030	-.06499	.03319	.00137	-.00115	.00020	.17338
.184	50.081	-.06447	.03277	.00130	-.00110	.00002	.17333
.219	89.875	-.06414	.03248	.00136	-.00113	-.00011	.17325
.273	148.880	-.06430	.03257	.00149	-.00128	-.00010	.17314
.210	199.890	-.06509	.03318	.00187	-.00164	.00019	.17288
.250	300.000	-.06811	.03404	.00209	-.00191	.00056	.17308
.127	400.110	-.06600	.03399	.00209	-.00190	.00055	.17304
.173	599.810	-.06606	.03401	.00211	-.00192	.00056	.17301
.252	799.930	-.06599	.03398	.00199	-.00187	.00054	.17289
.272	1000.100	-.06608	.03404	.00207	-.00190	.00055	.17302

RUN NO. 596/ 0 RN/L = 8.65

X	Z	CN	CLM	CY	CYN	CBL	CA
900.570	-.278	-.06614	.03301	.00209	-.00190	.00054	.17286
900.560	49.770	-.06622	.03394	.00210	-.00191	.00055	.17295
900.720	99.793	-.06612	.03390	.00209	-.00189	.00054	.17276
900.590	149.880	-.06618	.03391	.00211	-.00191	.00055	.17287
900.500	200.090	-.06615	.03390	.00211	-.00191	.00055	.17283
900.440	300.270	-.06619	.03392	.00210	-.00191	.00055	.17292
900.620	400.510	-.06615	.03390	.00212	-.00191	.00055	.17281
900.870	800.870	-.06625	.03393	.00212	-.00191	.00055	.17295
900.670	800.280	-.06617	.03390	.00209	-.00190	.00055	.17272
900.580	999.670	-.06613	.03390	.00213	-.00191	.00055	.17285

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ190) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -2.000  
Y = .000 PCMMGR = .000

RUN NO. 597/ 0 RN/L = 6.65

X	Z	CN	CLM	CY	CYN	CBL	CA
.491	402.460	-.04508	.02489	-.01128	.00416	.00107	.17211
.421	600.950	-.06394	.03221	.00154	-.00146	.00059	.17236
.360	800.730	-.06620	.03393	.00209	-.00191	.00055	.17286
.450	999.870	-.06621	.03392	.00210	-.00190	.00055	.17279

RUN NO. 598/ 0 RN/L = 6.65

X	Z	CN	CLM	CY	CYN	CBL	CA
300.330	399.110	-.04732	.02410	-.00914	.00432	.00106	.17228
300.250	598.860	-.06600	.03385	.00217	-.00192	.00055	.17242
300.310	798.650	-.06607	.03390	.00213	-.00191	.00055	.17285
300.390	998.840	-.06604	.03387	.00213	-.00191	.00055	.17281

RUN NO. 599/ 0 RN/L = 6.65

X	Z	CN	CLM	CY	CYN	CBL	CA
600.560	400.170	-.05916	.02892	-.00134	.00066	.00074	.17201
600.910	601.700	-.06603	.03386	.00213	-.00191	.00055	.17258
600.770	801.060	-.06608	.03390	.00211	-.00191	.00055	.17290
600.770	1000.300	-.06603	.03388	.00212	-.00192	.00055	.17284

RUN NO. 600/ 0 RN/L = 6.65

X	Z	CN	CLM	CY	CYN	CBL	CA
900.500	399.210	-.06614	.03384	.00210	-.00190	.00055	.17194
900.650	599.710	-.06613	.03386	.00211	-.00191	.00056	.17251
900.570	799.580	-.06619	.03388	.00204	-.00189	.00055	.17256
900.610	998.740	-.06619	.03388	.00211	-.00191	.00055	.17263

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ191) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XHRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YHRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZHRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -5.000  
 Y = 200.000 PCMBR = .000

RUN NO. 601/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.324	49.933	-.04509	.01815	-.03329	.01661	-.00352	.17335
.252	99.704	-.04605	.01978	-.03001	.01492	-.00225	.17476
.220	150.170	-.04294	.01773	-.02508	.01301	-.00228	.17387
.344	200.110	-.04072	.01580	-.02362	.01271	-.00278	.17316
.385	300.260	-.05655	.02797	-.01317	.00766	.00102	.17197
.380	400.540	-.06108	.03029	-.00313	.00175	.00076	.17162
.428	600.690	-.06627	.03391	.00207	-.00189	.00054	.17261
.419	800.510	-.06625	.03389	.00203	-.00188	.00054	.17267
.345	999.980	-.06628	.03391	.00208	-.00190	.00055	.17264

RUN NO. 602/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.230	50.020	-.04985	.02185	-.02367	.01350	-.00201	.17462
300.310	100.410	-.04489	.01845	-.02228	.01149	-.00235	.17409
300.290	150.290	-.04262	.01660	-.02152	.01260	-.00297	.17391
300.350	200.450	-.04584	.01850	-.01810	.01059	.00324	.17261
300.440	300.270	-.05933	.02922	-.00833	.00528	.00102	.17177
300.080	399.300	-.06632	.03391	.00210	-.00182	.00056	.17227
300.280	599.290	-.06651	.03408	.00222	-.00193	.00056	.17289
300.240	799.280	-.06648	.03406	.00217	-.00192	.00055	.17280
300.310	999.100	-.06655	.03409	.00217	-.00192	.00055	.17295

RUN NO. 603/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.570	.182	-.05348	.02400	-.00870	.00633	-.00206	.17302
600.680	50.417	-.05261	.02316	-.00834	.00609	-.00242	.17288
600.560	99.992	-.05650	.02604	-.00669	.00459	-.00152	.17195
600.630	150.000	-.06357	.03214	-.00465	.00299	.00078	.17154
600.440	199.290	-.06347	.03203	-.00318	.00198	.00075	.17140
600.350	298.410	-.06534	.03340	.00121	-.00127	.00058	.17182
600.800	400.850	-.06599	.03383	.00201	-.00187	.00053	.17185
600.790	600.810	-.06597	.03389	.00201	-.00188	.00054	.17251
600.670	800.820	-.06596	.03390	.00199	-.00188	.00054	.17257
600.600	1000.000	-.06588	.03385	.00203	-.00188	.00053	.17230

1A13 SR8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ191) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 606/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.600	-.006	-.05938	.02815	.00135	-.00128	-.00161	.17154
900.470	49.780	-.06625	.03394	.00209	-.00191	.00055	.17165
900.500	99.934	-.06619	.03394	.00215	-.00191	.00055	.17174
900.680	149.900	-.06624	.03399	.00208	-.00185	.00054	.17209
900.560	199.830	-.06623	.03398	.00213	-.00191	.00055	.17233
900.680	299.910	-.06631	.03403	.00211	-.00190	.00054	.17276
900.830	400.750	-.06629	.03402	.00211	-.00190	.00054	.17286
901.080	602.070	-.06630	.03402	.00213	-.00191	.00055	.17285
900.510	798.640	-.06620	.03397	.00213	-.00190	.00055	.17258
900.680	999.020	-.06632	.03403	.00214	-.00190	.00055	.17283

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -5.000  
Y = 200.000 PCMR = .000

1A13 SR8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ192) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 603/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.325	-.075	-.06019	.02904	-.00201	.00171	-.00141	.17407
.375	49.986	-.06010	.02893	-.00158	.00125	-.00140	.17357
.321	100.020	-.06153	.03004	-.00067	.00044	-.00095	.17303
.241	149.970	-.06295	.03111	.00044	-.00038	-.00054	.17256
.380	199.950	-.06408	.03198	.00138	-.00119	-.00028	.17216
.374	300.020	-.06648	.03398	.00210	-.00190	.00054	.17236
.448	400.330	-.06658	.03405	.00209	-.00189	.00054	.17279
.455	600.390	-.06653	.03402	.00213	-.00191	.00055	.17281
.361	800.020	-.06664	.03406	.00209	-.00190	.00054	.17296
.286	999.980	-.06663	.03405	.00216	-.00192	.00055	.17282

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -5.000  
Y = 400.000 PCMR = .000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ192) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 50.FT. XRRP = 1052.0000 IN. XT  
 LREF = 1290.1000 INCHES YRRP = .0000 IN. YT  
 BREF = 1290.1000 INCHES ZRRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -5.000  
 Y = 400.000 PCMBR = .000

RUN NO. 604/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.480	.481	-.06184	.03020	.00027	-.00017	-.00117	.17349
300.300	50.232	-.06288	.03101	.00099	-.00077	-.00078	.17291
300.350	100.140	-.06430	.03212	.00145	-.00127	-.00029	.17260
300.220	150.010	-.06586	.03346	.00191	-.00176	.00032	.17242
300.350	200.040	-.06636	.03395	.00217	-.00192	.00055	.17233
300.320	300.140	-.06649	.03401	.00212	-.00190	.00055	.17278
300.270	399.840	-.06649	.03400	.00215	-.00192	.00055	.17264
300.190	599.870	-.06651	.03402	.00216	-.00192	.00056	.17295
300.330	799.500	-.06637	.03397	.00211	-.00190	.00055	.17269
300.290	999.480	-.06653	.03402	.00215	-.00191	.00055	.17279

RUN NO. 608/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.480	.252	-.06299	.03120	.00106	-.00092	-.00074	.17292
600.560	50.365	-.06498	.03285	.00171	-.00158	.00003	.17248
600.450	100.320	-.06627	.03399	.00205	-.00189	.00054	.17257
600.420	150.130	-.06631	.03403	.00211	-.00190	.00055	.17282
600.460	200.000	-.06631	.03402	.00209	-.00190	.00054	.17283
600.420	299.750	-.06628	.03403	.00211	-.00190	.00054	.17290
600.550	399.950	-.06625	.03401	.00211	-.00190	.00054	.17272
600.470	599.700	-.06629	.03402	.00203	-.00189	.00054	.17282
600.400	799.400	-.06633	.03404	.00207	-.00189	.00054	.17286
600.430	999.370	-.06633	.03403	.00207	-.00190	.00054	.17288

RUN NO. 607/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.610	-.329	-.06630	.03402	.00213	-.00191	.00055	.17277
900.370	49.794	-.06631	.03402	.00206	-.00189	.00054	.17276
900.580	99.672	-.06633	.03403	.00210	-.00190	.00054	.17287
900.610	149.740	-.06629	.03401	.00209	-.00190	.00055	.17261
900.640	199.850	-.06631	.03403	.00214	-.00193	.00055	.17285
900.750	300.290	-.06626	.03400	.00212	-.00191	.00054	.17271
900.780	400.560	-.06632	.03403	.00210	-.00191	.00054	.17283
900.890	600.500	-.06638	.03405	.00208	-.00189	.00054	.17288
900.830	800.580	-.06628	.03401	.00211	-.00190	.00054	.17275
900.640	999.540	-.06640	.03405	.00213	-.00191	.00055	.17287

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

(RTJ193) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 609/ 0 RN/L = 6.62

X Z CN CLM CY CYN CA  
800.040 -0.0633 .03404 .00211 -.00191 .17285

RUN NO. 610/ 0 RN/L = 6.63

X Z CN CLM CY CYN CA  
300.330 799.980 -.06331 .03402 .00208 -.00190 .17273

RUN NO. 611/ 0 RN/L = 6.62

X Z CN CLM CY CYN CA  
600.540 799.660 -.06644 .03407 .00212 -.00191 .17285

RUN NO. 612/ 0 RN/L = 6.62

X Z CN CLM CY CYN CA  
900.720 799.950 -.06631 .03401 .00207 -.00189 .17253

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 613/ 0 RN/L = 6.62

X Z CN CLM CY CYN CA  
800.040 -0.0633 .03404 .00211 -.00191 .17285

RUN NO. 614/ 0 RN/L = 6.62

X Z CN CLM CY CYN CA  
300.420 799.870 -.06608 .03399 .00205 -.00189 .17266

RUN NO. 615/ 0 RN/L = 6.62

X Z CN CLM CY CYN CA  
600.590 799.930 -.06618 .03390 .00207 -.00189 .17258

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -5.000  
Y = 800.000 PCMR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -10.000  
Y = 800.000 PCMR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

(RTJ194) ( 31 JUL 75 )

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ194) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 618/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.690	600.120	-.06621	.03393	.00200	-.00188	.00053	.17264

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -10.000  
Y = 800.000 PCHMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 620/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.202	50.061	-.05054	.02145	-.00722	.00578	-.00335	.17332
.259	99.971	-.05198	.02247	-.00635	.00500	-.00311	.17248
.231	149.670	-.05642	.02584	-.00419	.00313	-.00208	.17136
.291	199.850	-.06163	.03003	-.00131	.00074	-.00065	.17044
.306	300.060	-.06609	.03360	.00188	-.00188	.00052	.17012
.359	400.220	-.06619	.03389	.00201	-.00118	.00053	.17205
.449	600.480	-.06605	.03389	.00195	-.00187	.00052	.17262
.438	800.310	-.06615	.03393	.00196	-.00186	.00052	.17267
.055	1000.000	-.06604	.03388	.00196	-.00187	.00053	.17250

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -10.000  
Y = 400.000 PCHMR = .000

RUN NO. 617/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.410	.000	-.05480	.02482	-.00114	.00110	-.00306	.17351
300.480	50.160	-.05660	.02603	-.00035	.00031	-.00262	.17239
300.360	99.928	-.06046	.02886	.00070	-.00067	-.00151	.17087
300.460	150.000	-.06477	.03245	.00159	-.00155	-.00001	.17049
300.530	199.940	-.06616	.03370	.00199	-.00187	.00053	.17087
300.520	299.920	-.06613	.03387	.00200	-.00187	.00053	.17209
300.830	400.080	-.06615	.03390	.00202	-.00188	.00053	.17261
300.690	600.410	-.06611	.03387	.00206	-.00189	.00053	.17253
300.870	800.530	-.06620	.03391	.00199	-.00187	.00053	.17255
300.240	1000.000	-.06610	.03389	.00206	-.00189	.00053	.17249

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -10.000  
Y = 800.000 PCHMR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -10.000  
Y = 400.000 PCHMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09110

(RTJ195) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -10.000  
 Y = 400.000 PCMPER = .000

RUN NO. 618/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.650	.329	-.05944	.02814	.00030	-.00025	-.00190	.17221
600.330	50.153	-.06268	.03078	.00123	-.00119	-.00076	.17153
600.460	100.230	-.06612	.03379	.00203	-.00188	.00051	.17191
600.350	150.170	-.06603	.03383	.00203	-.00189	.00053	.17191
600.390	200.020	-.06617	.03392	.00205	-.00189	.00053	.17246
600.370	299.980	-.06612	.03391	.00201	-.00189	.00053	.17265
600.420	399.970	-.06607	.03389	.00203	-.00189	.00054	.17263
600.270	599.840	-.06611	.03390	.00208	-.00190	.00054	.17253
600.280	799.530	-.06609	.03388	.00205	-.00189	.00053	.17239
600.350	999.190	-.06613	.03390	.00200	-.00187	.00053	.17254

RUN NO. 619/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.650	-.195	-.06602	.03380	.00184	-.00181	.00046	.17248
900.560	49.844	-.06601	.03388	.00195	-.00186	.00052	.17246
900.530	99.776	-.06616	.03393	.00196	-.00187	.00052	.17268
900.590	149.840	-.06610	.03392	.00197	-.00187	.00053	.17275
900.500	199.830	-.06608	.03391	.00197	-.00187	.00052	.17270
900.660	300.150	-.06618	.03395	.00193	-.00186	.00052	.17278
900.940	400.500	-.06610	.03391	.00201	-.00188	.00053	.17268
900.870	600.270	-.06617	.03395	.00198	-.00187	.00052	.17274
900.830	800.480	-.06612	.03392	.00195	-.00187	.00053	.17271
900.750	1000.200	-.06611	.03391	.00200	-.00187	.00053	.17266

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IA13 SOURCE DATA

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IA13 SRS(SB) W/O PLUMES SEPARATING FROM ORTIO

(RTJ186) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHPP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YHPP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZHPP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -10.000  
Y = 200.000 PCHEER = .000

RUN NO. 621/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.321	300.430	-.04272	.01904	-.02507	.01362	.00035	.17025
.483	400.600	-.05272	.02491	-.01090	.00685	.00111	.17056
.511	600.690	-.06614	.03369	.00201	-.00187	.00053	.17216
.499	800.650	-.06619	.03395	.00193	-.00187	.00053	.17274
.123	1000.000	-.06625	.03396	.00197	-.00187	.00053	.17270

RUN NO. 622/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.410	50.002	-.03729	.01191	-.04100	.02438	-.00369	.17464
300.370	100.060	-.03813	.01382	-.03696	.02139	-.00266	.17373
300.330	149.830	-.03302	.01018	-.03380	.01966	-.00334	.17321
300.210	199.190	-.03510	.01141	-.02799	.01616	-.00318	.17171
300.580	300.700	-.05402	.02619	-.01513	.00938	.00125	.17159
300.520	400.630	-.06226	.03103	-.00087	.00035	.00068	.17134
300.670	600.600	-.06596	.03380	.00196	-.00187	.00052	.17270
300.650	800.840	-.06604	.03382	.00200	-.00187	.00053	.17276
300.310	999.980	-.06599	.03380	.00203	-.00188	.00053	.17268

RUN NO. 623/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.470	100.070	-.05216	.02237	-.01171	.00798	-.00208	.17169
600.440	150.050	-.06129	.03034	-.00885	.00580	.00072	.17100
600.200	199.340	-.06175	.03071	-.00667	.00439	.00091	.17100
599.950	298.860	-.06331	.03175	-.00096	.00046	.00069	.17131
600.470	400.030	-.06592	.03373	.00200	-.00189	.00052	.17165
600.760	600.680	-.06603	.03380	.00202	-.00188	.00053	.17265
600.810	800.830	-.06596	.03379	.00203	-.00189	.00053	.17266
600.470	1000.000	-.06609	.03383	.00200	-.00188	.00053	.17267

1A13 SRB(S8) W/O PLUMES SEPARATING FROM 09T10

(RTJ196) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 624/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.250	99.930	-.06601	.03370	.00206	-.00186	.00053	.17109
900.550	149.780	-.06584	.03366	.00200	-.00190	.00052	.17117
900.510	199.710	-.06597	.03374	.00200	-.00189	.00053	.17157
900.820	300.000	-.06595	.03378	.00196	-.00187	.00052	.17234
900.990	400.850	-.06600	.03380	.00200	-.00188	.00053	.17260
901.190	602.420	-.06598	.03379	.00196	-.00187	.00052	.17257
900.180	798.560	-.06582	.03375	.00196	-.00187	.00053	.17254
900.450	999.090	-.06597	.03378	.00202	-.00189	.00053	.17253

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -10.000  
 Y = 200.000 PCHEER = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 625/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.959	403.020	-.03590	.02082	-.01095	.00313	.00096	.17237
.594	601.020	-.06241	.03117	.00114	-.00123	.00057	.17156
.445	800.850	-.06589	.03374	.00196	-.00187	.00052	.17233
.129	999.950	-.06604	.03391	.00199	-.00187	.00052	.17265

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -10.000  
 Y = .000 PCHEER = .000

RUN NO. 626/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.090	398.350	-.04239	.02183	-.00997	.00444	.00106	.17178
300.320	599.250	-.06616	.03399	.00207	-.00190	.00053	.17193
300.060	798.400	-.06612	.03399	.00201	-.00189	.00053	.17254
300.200	998.730	-.06621	.03402	.00207	-.00191	.00053	.17267

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IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ197) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 527/ 0 RN/L = 8.83

X	Z	CN	CLM	CY	CYN	CA
600.550	400.160	-.05877	.02743	-.00215	.00125	.17154
601.000	601.630	-.06621	.03402	.00204	-.00189	.17259
600.700	801.070	-.06622	.03402	.00206	-.00190	.17260
600.620	1000.200	-.06625	.03404	.00203	-.00189	.17266

RUN NO. 528/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CA
900.440	399.020	-.06621	.03398	.00210	-.00192	.17189
900.480	599.660	-.06622	.03403	.00202	-.00189	.17270
900.510	799.840	-.06623	.03405	.00201	-.00188	.17263
900.450	998.500	-.06619	.03402	.00205	-.00190	.17283

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ198) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 629/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CA
.000	.000	-.03223	.02492	-.00134	-.00355	.17388
.188	598.800	-.05420	.02951	.00121	-.03132	.17158
.756	800.820	-.06625	.03403	.00208	-.00189	.17257
-.859	998.850	-.06640	.03409	.00204	-.00190	.17278

RUN NO. 630/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CA
300.360	399.950	-.03284	.01857	-.00882	.00145	.17348
300.680	600.220	-.06536	.03320	.00204	-.00186	.17185
899.350	788.200	-.06625	.03353	.00214	-.00193	.17282
299.740	998.190	-.06646	.03400	.00207	-.00190	.17255

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -10.000  
 Y = .000 PCMBR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -20.000  
 Y = .000 PCMBR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ198) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 637/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.820	400.170	-.04731	.02120	-.00423	.00225	.00081	.17118
600.140	599.810	-.06646	.03397	.00194	-.00187	.00052	.17171
601.210	801.740	-.06650	.03402	.00198	-.00187	.00052	.17249
599.460	999.770	-.06656	.03406	.00200	-.00188	.00052	.17260

RUN NO. 638/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.820	400.080	-.06603	.03363	.00194	-.00183	.00053	.17128
900.420	598.890	-.06656	.03405	.00197	-.00187	.00052	.17261
901.230	801.610	-.06650	.03401	.00198	-.00187	.00052	.17245
899.910	999.790	-.06655	.03403	.00198	-.00188	.00051	.17246

IA13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ199) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 632/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.103	401.250	-.02205	.00975	-.02091	.00976	.00126	.17196
-.073	598.120	-.06248	.03099	.00130	-.00129	.00058	.17075
-.382	799.020	-.06535	.03396	.00189	-.00188	.00052	.17245
-.251	998.920	-.06645	.03399	.00206	-.00189	.00053	.17253

RUN NO. 631/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.290	400.160	-.04333	.01845	-.01392	.00902	.00128	.17010
300.670	600.460	-.06641	.03390	.00198	-.00188	.00053	.17146
300.810	801.120	-.06638	.03397	.00201	-.00188	.00053	.17245
300.380	1000.100	-.06641	.03399	.00198	-.00187	.00052	.17244

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -20.000  
 Y = .000 PCHMR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -20.000  
 Y = .000 PCHMR = .000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ199) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -20.000  
 Y = 200.000 PCMR = .000

RUN NO. 636/ 0 RN/L = 3.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.660	300.040	-.05419	.02503	-.01142	.00801	.00114	.16903
599.940	398.770	-.06322	.03148	-.00017	-.00020	.00062	.17018
600.910	600.480	-.06647	.03399	.00191	-.00185	.00051	.17231
601.120	801.100	-.06653	.03402	.00195	-.00185	.00051	.17247
599.530	999.870	-.06651	.03402	.00194	-.00185	.00051	.17244

RUN NO. 639/ 0 RN/L = 6.82

X	Z	CN	CLM	CY	CYN	CBL	CA
900.550	100.740	-.06462	.03259	-.00383	.00261	.00077	.16821
900.210	150.550	-.06511	.03293	-.00034	-.00005	.00084	.16889
899.590	199.710	-.06615	.03372	.00190	-.00185	.00051	.16993
899.070	298.890	-.06633	.03386	.00195	-.00188	.00051	.17062
900.800	400.150	-.06659	.03399	.00191	-.00186	.00051	.17183
901.080	600.840	-.06654	.03403	.00195	-.00186	.00051	.17244
901.080	800.880	-.06653	.03403	.00195	-.00186	.00051	.17245
899.510	999.870	-.06660	.03406	.00199	-.00187	.00052	.17260

## REFERENCE DATA

BREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -20.000  
 Y = 400.000 PCMR = .000

RUN NO. 633/ 0 RN/L = 6.82

X	Z	CN	CLM	CY	CYN	CBL	CA
.250	400.210	-.04978	.03197	-.01367	.00962	.00127	.16687
.702	600.380	-.06645	.03374	.00198	-.00188	.00053	.17037
.792	800.650	-.06635	.03396	.00199	-.00188	.00053	.17244
-.565	999.930	-.06638	.03396	.00197	-.00187	.00052	.17244

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1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ200) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XRRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YRRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZRRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -20.000  
Y = 400.000 PCHMBR = .000

RUN NO. 634/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.700	50.373	-.02187	-.03303	-.03845	.02783	-.00710	.15855
300.510	99.990	-.03018	.00415	-.03121	.02372	-.03589	.16771
300.420	149.810	-.04011	.01200	-.02426	.01824	-.00403	.16842
300.230	199.790	-.05488	.02469	-.01600	.01169	-.00022	.16661
300.000	299.980	-.06273	.03122	-.00263	.00165	.00072	.16884
300.270	399.880	-.06630	.03389	.00210	-.00196	.00052	.17091
300.830	800.240	-.06641	.03398	.00199	-.00188	.00053	.17240
300.840	800.900	-.06631	.03396	.00200	-.00187	.00052	.17241
299.540	999.900	-.06649	.03404	.00200	-.00188	.00052	.17262

RUN NO. 635/ 0 RN/L = 6.52

X	Z	CN	CLM	CY	CYN	CBL	CA
599.930	50.229	-.04990	.01991	-.00052	.00059	-.00481	.17031
600.100	100.120	-.05970	.02763	.00117	-.00109	-.00204	.16904
600.280	150.120	-.06672	.03373	.00214	-.00195	.00049	.16886
600.250	199.770	-.06666	.03367	.00207	-.00190	.00052	.16891
600.420	299.990	-.06673	.03371	.00211	-.00190	.00053	.17006
600.530	400.060	-.06676	.03403	.00208	-.00191	.00053	.17193
600.360	600.250	-.06680	.03404	.00206	-.00188	.00052	.17247
600.040	799.660	-.06657	.03403	.00201	-.00188	.00052	.17245
600.090	999.040	-.06659	.03404	.00195	-.00186	.00052	.17247

RUN NO. 640/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
899.980	99.872	-.06642	.03300	.00194	-.00185	.00051	.16817
900.630	150.040	-.06636	.03309	.00197	-.00185	.00051	.16866
900.780	199.790	-.06661	.03359	.00197	-.00187	.00052	.16976
901.070	300.220	-.06660	.03403	.00200	-.00187	.00052	.17227
900.950	400.350	-.06658	.03403	.00199	-.00188	.00052	.17241
900.510	600.270	-.06652	.03401	.00197	-.00187	.00052	.17235
900.220	799.440	-.06654	.03403	.00201	-.00188	.00052	.17247
900.320	999.260	-.06659	.03403	.00193	-.00185	.00051	.17243

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 641/ 0 RN/L = 6.62

X Z CN CLM CY CYN CBL CA  
-508 799.980 -.06640 .03398 .00189 -.00185 .00051 .17235

RUN NO. 642/ 0 RN/L = 6.63

X Z CN CLM CY CYN CBL CA  
300.570 800.010 -.06639 .03397 .00189 -.00184 .00051 .17235

RUN NO. 643/ 0 RN/L = 6.63

X Z CN CLM CY CYN CBL CA  
800.600 800.180 -.06643 .03398 .00188 -.00184 .00050 .17228

RUN NO. 644/ 0 RN/L = 6.63

X Z CN CLM CY CYN CBL CA  
800.740 800.100 -.06637 .03396 .00188 -.00184 .00050 .17226

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -20.000  
Y = 800.000 PCMR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 645/ 0 RN/L = 6.63

X Z CN CLM CY CYN CBL CA  
.173 200.280 -.04731 .02206 -.02568 .00480 -.00438 .17591  
.159 300.730 -.03750 .01965 -.02716 .00722 -.00367 .17613  
.449 402.800 -.04939 .02641 -.01670 .00713 .00106 .17323  
.424 601.300 -.06308 .03153 .00082 -.00096 .00061 .17245  
.428 801.210 -.06618 .03381 .00192 -.00183 .00054 .17302  
.153 1000.100 -.06624 .03382 .00197 -.00184 .00055 .17303

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = 5.000  
Y = .000 PCMR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = 5.000  
Y = .000 PCMR = .000

RUN NO. 648/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.690	.959	-.04068	.01279	-.01086	.00711	-.00465	.17380
900.570	50.450	-.05476	.02375	-.01059	.00662	-.00133	.17249
900.580	100.170	-.06254	.03087	-.01001	.00618	.00059	.17233
900.550	150.510	-.06268	.03154	-.00923	.00579	.00098	.17278
900.650	200.760	-.06151	.03052	-.00722	.00474	.00095	.17249
900.570	300.120	-.06357	.03183	-.00028	-.00003	.00068	.17187
900.700	400.180	-.06632	.03392	.00194	-.00183	.00055	.17248
900.660	600.480	-.06637	.03396	.00203	-.00186	.00056	.17312
900.840	801.520	-.06617	.03390	.00202	-.00184	.00055	.17295
900.590	1000.100	-.06636	.03397	.00203	-.00186	.00055	.17314

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ203) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = 5.000  
Y = .000 PCMR = .000

RUN NO. 648/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.277	200.250	-.05118	.02295	-.01153	.00693	-.00241	.17443
.364	300.170	-.05959	.02906	-.00623	.00341	-.00017	.17287
.223	399.830	-.06309	.03159	-.00184	.00088	.00074	.17242
.081	599.020	-.06624	.03383	.00197	-.00184	.00055	.17303
.114	799.460	-.06625	.03384	.00191	-.00183	.00054	.17322
.315	999.800	-.06616	.03381	.00189	-.00181	.00054	.17310

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IA13 SOURCE DATA

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IA13 SRB(58) W/O PLUMES SEPARATING FROM 09T10

(RTJ203) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 648/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.600	.274	-.09800	.02887	.00080	-.00070	-.00230	.17314
900.410	48.768	-.06532	.03290	.00185	-.00177	.00013	.17267
900.490	100.130	-.06641	.03395	.00184	-.00184	.00055	.17270
900.530	150.190	-.06633	.03393	.00201	-.00184	.00055	.17274
900.560	200.210	-.06627	.03392	.00202	-.00185	.00055	.17281
900.530	300.310	-.06631	.03395	.00198	-.00184	.00055	.17302
900.680	401.040	-.06643	.03398	.00201	-.00184	.00055	.17316
900.950	601.760	-.06643	.03399	.00200	-.00185	.00055	.17318
900.430	798.260	-.06635	.03398	.00195	-.00183	.00054	.17307
900.390	998.960	-.06633	.03395	.00200	-.00184	.00055	.17310

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = 5.000  
Y = 200.000 PCHMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

IA13 SRB(58) W/O PLUMES SEPARATING FROM 09T10

(RTJ204) ( 31 JUL 75 )

## PARAMETRIC DATA

X	Z	CN	CLM	CY	CYN	CBL	CA
.163	.317	-.06507	.03304	.00080	-.00077	.00018	.17359
.171	50.119	-.06431	.03242	.00079	-.00070	-.00007	.17365
.155	100.140	-.06369	.03187	.00080	-.00072	-.00028	.17315
.255	150.120	-.06367	.03177	.00097	-.00088	-.00038	.17329
.198	200.150	-.06398	.03205	.00121	-.00117	-.00023	.17285
.189	300.060	-.06608	.03376	.00187	-.00181	.00054	.17282
.193	400.240	-.06615	.03378	.00193	-.00183	.00054	.17296
.179	599.980	-.06617	.03380	.00189	-.00182	.00054	.17307
.221	800.000	-.06615	.03379	.00191	-.00183	.00054	.17300
.162	999.940	-.06620	.03382	.00191	-.00183	.00054	.17307

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = 5.000  
Y = 400.000 PCHMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ204) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = 5.000  
 Y = 400.000 PCMR = .000

RUN NO. 650/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.370	-1.165	-.06636	.03397	.00200	-.00185	.00055	.17310
900.400	49.922	-.06638	.03398	.00189	-.00181	.00054	.17311
900.400	99.927	-.06641	.03399	.00193	-.00183	.00054	.17324
900.520	149.990	-.06642	.03401	.00193	-.00183	.00054	.17330
900.610	200.340	-.06645	.03400	.00198	-.00184	.00055	.17314
900.450	300.520	-.06633	.03395	.00200	-.00184	.00055	.17300
900.540	400.850	-.06641	.03400	.00197	-.00183	.00054	.17320
900.700	600.930	-.06635	.03397	.00197	-.00184	.00054	.17310
900.750	800.770	-.06636	.03396	.00197	-.00184	.00055	.17305
900.500	999.310	-.06639	.03398	.00201	-.00185	.00056	.17312

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ205) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -5.000  
 Y = 400.000 PCMR = .000

RUN NO. 651/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.469	601.070	-.06654	.02683	-.00104	.00041	.00072	.17140
.463	801.130	-.06639	.03397	.00197	-.00183	.00054	.17303
.209	1000.100	-.06639	.03396	.00192	-.00182	.00053	.17300

RUN NO. 852/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.590	600.480	-.06623	.03390	.00193	-.00179	.00054	.17223
300.040	798.850	-.06625	.03392	.00194	-.00182	.00054	.17295
300.170	998.960	-.06634	.03396	.00194	-.00182	.00054	.17303

DATE 02 AUG 75 1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ205) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 653/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.600	400.270	-.05578	.02667	-.00423	.00249	.00081	.17150
601.020	601.790	-.06637	.03395	.00191	-.00182	.00053	.17273
600.830	801.110	-.06632	.03395	.00195	-.00183	.00054	.17306
600.550	999.960	-.06633	.03396	.00198	-.00183	.00054	.17306

RUN NO. 654/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.340	398.900	-.06628	.03394	.00192	-.00181	.00053	.17242
900.600	599.830	-.06632	.03396	.00193	-.00182	.00053	.17312
900.760	800.500	-.06629	.03394	.00189	-.00181	.00053	.17304
900.460	998.790	-.06631	.03396	.00196	-.00183	.00054	.17309

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 662/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
.451	200.640	-.03175	.00929	-.03213	.01691	-.00445	.17458
.463	300.370	-.04141	.01571	-.02332	.01333	-.00215	.17174
.517	400.780	-.05606	.02685	-.01190	.00765	.00114	.16988
.436	600.670	-.06613	.03385	.00191	-.00181	.00053	.17213
.445	800.830	-.06621	.03392	.00191	-.00181	.00053	.17292
.230	1000.100	-.06615	.03388	.00194	-.00181	.00053	.17282

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ206) ( 31 JUL 75 )

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = -5.000  
Y = .000 PCMPR = .000

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = -5.000  
Y = .000 PCMPR = .000

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OF EXCELLENT QUALITY

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SR8(S8) W/O PLUMES SEPARATING FROM 08110

(RTJ206) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRFF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -5.000  
 Y = 200.000 PCHMR = .000

RUN NO. 659/ 0 RN/L = 8.64

X	Z	CN	CLM	CY	CYN	CBL	CA
300.360	99.845	-.03528	.01041	-.02756	.01598	-.00503	.17549
300.350	150.110	-.03527	.01100	-.02670	.01566	-.00438	.17483
300.420	199.910	-.03640	.01151	-.02453	.01472	-.00421	.17323
300.840	300.900	-.05693	.02800	-.01407	.00880	.00118	.17201
300.660	400.720	-.06320	.03167	-.00090	.00039	.00070	.17170
300.580	500.750	-.06617	.03390	.00194	-.00182	.00053	.17282
300.570	800.940	-.06618	.03390	.00195	-.00183	.00054	.17286
300.320	1000.100	-.06622	.03392	.00194	-.00183	.00054	.17297

RUN NO. 658/ 0 RN/L = 8.64

X	Z	CN	CLM	CY	CYN	CBL	CA
600.810	50.840	-.04593	.01742	-.01074	.00788	-.00428	.17355
600.600	100.300	-.05077	.02121	-.00943	.00671	-.00306	.17275
600.560	150.040	-.05935	.02828	-.00704	.00469	-.00053	.17200
600.370	199.310	-.06328	.03176	-.00528	.00347	.00085	.17168
600.230	298.530	-.06425	.03241	-.00053	.00013	.00068	.17181
600.700	400.890	-.06609	.03383	.00196	-.00163	.00054	.17186
600.770	600.900	-.06619	.03392	.00199	-.00183	.00054	.17296
600.800	800.910	-.06622	.03392	.00201	-.00183	.00054	.17294
600.570	1000.000	-.06621	.03391	.00197	-.00184	.00054	.17290

RUN NO. 655/ 0 RN/L = 8.64

X	Z	CN	CLM	CY	CYN	CBL	CA
900.830	.911	-.05414	.02367	.00039	-.00048	-.00331	.17222
900.660	50.319	-.06422	.03196	.00163	-.00170	-.00015	.17120
900.630	100.240	-.06617	.03374	.00186	-.00181	.00053	.17126
900.690	150.340	-.06629	.03385	.00187	-.00181	.00053	.17164
900.510	200.320	-.06625	.03388	.00190	-.00182	.00054	.17207
900.460	299.390	-.06630	.03391	.00193	-.00180	.00053	.17269
899.980	397.510	-.06630	.03394	.00192	-.00182	.00054	.17291
901.030	601.210	-.06626	.03391	.00196	-.00183	.00054	.17285
900.920	800.870	-.06635	.03395	.00193	-.00182	.00053	.17312
900.710	999.950	-.06632	.03395	.00193	-.00182	.00053	.17303

1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORBIT

(RTJ207) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -5.000  
 Y = 400.000 PCMR = .000

RUN NO. 661 / 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
.296	150.250	-.05651	.02582	-.00223	.00182	-.00261	.17249
.294	200.050	-.06031	.02875	-.00035	.00017	-.00142	.17138
.235	300.020	-.06512	.03367	.00179	-.00179	.00048	.17146
.414	400.400	-.06616	.03388	.00186	-.00180	.00052	.17263
.329	600.490	-.06617	.03390	.00193	-.00181	.00053	.17289
.373	800.510	-.06616	.03391	.00189	-.00181	.00053	.17297
.264	1000.000	-.06611	.03387	.00187	-.00180	.00052	.17273

RUN NO. 660 / 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
299.890	98.794	-.06016	.02880	.00017	-.00019	-.00169	.17273
300.390	150.410	-.06380	.03179	.00118	-.00122	-.00039	.17220
300.390	200.320	-.06508	.03377	.00178	-.00176	.00048	.17231
300.330	299.910	-.06609	.03387	.00188	-.00181	.00053	.17271
300.310	399.850	-.06609	.03387	.00196	-.00183	.00054	.17282
300.240	599.650	-.06606	.03388	.00194	-.00182	.00053	.17294
300.210	799.540	-.06608	.03387	.00194	-.00182	.00053	.17285
300.310	999.390	-.06616	.03388	.00195	-.00183	.00053	.17282

RUN NO. 657 / 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
800.400	-.194	-.06120	.02987	.00023	-.00021	-.00140	.17326
800.940	49.958	-.06307	.03117	.00100	-.00103	-.00069	.17265
800.570	100.050	-.06606	.03368	.00178	-.00174	.00041	.17268
600.650	150.250	-.06628	.03392	.00190	-.00181	.00053	.17266
600.680	200.350	-.06625	.03392	.00198	-.00183	.00054	.17290
600.700	300.310	-.06625	.03393	.00193	-.00182	.00054	.17294
600.820	400.490	-.06627	.03393	.00194	-.00182	.00054	.17303
600.750	600.560	-.06625	.03394	.00193	-.00182	.00054	.17304
800.820	800.770	-.06630	.03394	.00195	-.00182	.00054	.17303
600.640	1000.100	-.06626	.03392	.00196	-.00183	.00054	.17299



REFERENCE DATA  
SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 656/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
900.580	.226	-.06600	.03371	.00179	-.00173	.00043	.17295
900.680	50.462	-.06617	.03369	.00196	-.00181	.00054	.17284
900.720	100.970	-.06618	.03390	.00194	-.00182	.00054	.17295
900.610	150.560	-.06629	.03393	.00196	-.00183	.00054	.17302
900.740	200.530	-.06607	.03395	.00199	-.00183	.00054	.17277
900.590	300.320	-.06626	.03393	.00198	-.00183	.00054	.17312
900.540	399.560	-.06617	.03369	.00199	-.00183	.00054	.17287
900.450	599.310	-.06623	.03392	.00196	-.00183	.00053	.17299
900.470	799.560	-.06620	.03392	.00193	-.00182	.00054	.17301
900.470	999.470	-.06628	.03394	.00191	-.00182	.00053	.17302

PARAMETRIC DATA  
MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = -5.000  
Y = 400.000 PCMBR = .000

RUN NO. 653/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
.299	800.100	-.06620	.03391	.00194	-.00183	.00053	.17290

RUN NO. 664/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
300.300	800.100	-.06615	.03390	.00193	-.00182	.00053	.17296

RUN NO. 665/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.650	800.060	-.06614	.03388	.00195	-.00183	.00054	.17283

RUN NO. 666/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CBL	CA
900.630	800.260	-.06617	.03389	.00190	-.00181	.00053	.17274

REFERENCE DATA  
SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA  
MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = -5.000  
Y = 800.000 PCMBR = .000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORT10

(RTJ209) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 567/ 0 RN/L = 8.65

X	Z	CN	CLM	CY	CYN	CA
.158	800.000	-.06622	.03391	.00195	-.00182	.00053

RUN NO. 568/ 0 RN/L = 5.68

X	Z	CN	CLM	CY	CYN	CA
300.490	800.140	-.06623	.03392	.00189	-.00181	.00052

RUN NO. 569/ 0 RN/L = 8.65

X	Z	CN	CLM	CY	CYN	CA
800.770	800.270	-.06622	.03390	.00192	-.00181	.00053

RUN NO. 570/ 0 RN/L = 8.64

X	Z	CN	CLM	CY	CYN	CA
900.780	800.270	-.06812	.03389	.00190	-.00181	.00053

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = -10.000  
Y = 800.000 PCMPR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 580/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN	CA
.355	300.010	-.06480	.03222	-.00019	-.00020	.00033
.363	400.450	-.06608	.03320	.00189	-.00182	.00051
.432	600.410	-.06814	.03385	.00186	-.00181	.00052
.465	800.650	-.06815	.03388	.00194	-.00182	.00052
.225	1000.100	-.06626	.03392	.00195	-.00183	.00053

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = -10.000  
Y = 400.000 PCMPR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORT10

(RTJ210) ( 31 JUL 75 )

DATE 02 AUG 75

1A13 SOURCE DATA

PAGE 284

1A13 S88(S8) 4/0 PLUMES SEPARATING FROM 09T10

(RTJ210) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BC = .000  
 DALPHA = -10.000 OBETA = -10.000  
 Y = 400.000 PCMRB = .000

RUN NO. 677/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.600	200.340	-.06456	.03179	.00155	-.00157	-.00009	.16867
300.530	300.090	-.06573	.03265	.00181	-.00178	.00051	.16789
300.480	400.350	-.06631	.03352	.00192	-.00181	.00053	.17041
300.670	600.350	-.06607	.03385	.00195	-.00182	.00052	.17267
300.630	800.730	-.06612	.03386	.00195	-.00182	.00053	.17259
300.220	1000.100	-.06617	.03389	.00191	-.00181	.00053	.17275

RUN NO. 676/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.430	100.060	-.06374	.03144	.00124	-.00135	-.00043	.17071
600.470	150.250	-.06628	.03373	.00173	-.00177	.00050	.17131
600.680	200.230	-.06617	.03384	.00181	-.00179	.00051	.17207
600.590	300.310	-.06618	.03390	.00191	-.00182	.00053	.17270
600.650	400.330	-.06617	.03389	.00191	-.00181	.00052	.17276
600.630	600.480	-.06615	.03390	.00189	-.00182	.00053	.17281
600.840	800.780	-.06616	.03388	.00185	-.00179	.00052	.17280
600.370	1000.000	-.06624	.03392	.00190	-.00180	.00052	.17275

RUN NO. 671/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
900.530	.000	-.06513	.03293	.00142	-.00151	.00008	.17241
900.580	49.890	-.06616	.03388	.00171	-.00176	.00050	.17252
900.560	99.909	-.06621	.03391	.00182	-.00179	.00051	.17270
900.620	150.040	-.06613	.03390	.00180	-.00178	.00051	.17275
900.570	200.070	-.06615	.03389	.00187	-.00181	.00052	.17278
900.560	300.240	-.06613	.03388	.00186	-.00180	.00052	.17274
900.950	400.660	-.06620	.03390	.00191	-.00181	.00052	.17280
900.960	600.550	-.06615	.03387	.00191	-.00181	.00052	.17262
900.900	800.630	-.06629	.03394	.00194	-.00182	.00053	.17292
900.360	999.930	-.06627	.03394	.00192	-.00181	.00052	.17289

DATE 02 AUG 75

IA13 SOURCE DATA

PAGE 295

IA13 SRE (S8) W/O PLUMES SEPARATING FROM ORTID

(RTJ211) (31 JUL 75)

## REFERENCE DATA

SREF = 2630.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 44.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -10.000  
 Y = 200.000 PCHEER = .000

RUN NO. 678 / 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.553	401.330	-.04312	.01959	-.02578	.01584	.00157	.16905
.436	800.870	-.06597	.03373	.00194	-.00182	.00053	.17152
.553	800.860	-.06613	.03386	.00193	-.00182	.00052	.17259
.142	1000.000	-.06605	.03384	.00194	-.00182	.00053	.17250

RUN NO. 678 / 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.640	300.830	-.04950	.02323	-.02356	.01434	.00124	.17031
300.360	400.570	-.05703	.02725	-.00759	.00514	.00096	.17049
300.650	600.630	-.06628	.03390	.03188	-.00181	.00052	.17245
300.790	400.910	-.06619	.03390	.00198	-.00183	.00053	.17281
300.230	999.970	-.06622	.03391	.00195	-.00182	.00053	.17279

RUN NO. 672 / 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.250	199.660	-.06147	.03051	-.00973	.00652	.00103	.17074
599.880	298.800	-.06170	.03049	-.00395	.00260	.00078	.17086
600.390	399.810	-.06618	.03390	.00199	-.00187	.00052	.17295
600.760	600.820	-.06619	.03391	.00189	-.00181	.00053	.17278
600.780	800.980	-.06604	.03384	.00191	-.00181	.00052	.17258
600.280	999.960	-.06619	.03391	.00186	-.00181	.00052	.17301

RUN NO. 673 / 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
800.070	199.210	-.06609	.03259	.00188	-.00181	.00052	.17023
800.670	299.930	-.06615	.03382	.00189	-.00181	.00053	.17193
801.070	400.840	-.06607	.03385	.00194	-.00181	.00052	.17253
800.550	599.970	-.06593	.03378	.00188	-.00180	.00052	.17239
800.200	798.960	-.06608	.03385	.00188	-.00180	.00052	.17253
800.560	999.160	-.06619	.03391	.00192	-.00181	.00052	.17287

DATE 02 AUG 75

1A13 SOURCE DATA

PAGE 298

1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORT10

(RTJ212) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -10.000  
 Y = .000 PCMMR = .000

RUN NO. 681/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.523	601.080	-.04906	.02196	-.00156	.00071	.00075	.17081
.648	801.170	-.06628	.03390	.00196	-.00183	.00053	.17258
.167	1000.000	-.06622	.03390	.00195	-.00183	.00053	.17265

RUN NO. 682/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.470	600.500	-.06471	.03272	.00173	-.00166	.00054	.17145
299.920	798.670	-.06619	.03388	.00189	-.00181	.00052	.17267
300.010	898.910	-.06622	.03390	.00180	-.00181	.00052	.17267

RUN NO. 675/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
600.710	400.270	-.05081	.02338	-.00599	.00370	.00089	.17069
600.950	601.500	-.06627	.03391	.00189	-.00181	.00053	.17232
600.920	801.140	-.06618	.03389	.00185	-.00180	.00052	.17269
600.340	999.930	-.06617	.03389	.00193	-.00181	.00052	.17267

RUN NO. 674/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.290	299.830	-.05605	.02656	-.00516	.00339	.00085	.1702
900.600	400.210	-.06614	.03385	.00186	-.00179	.00052	.17179
900.360	599.010	-.06607	.03386	.00192	-.00181	.00052	.17253
900.980	801.320	-.06622	.03391	.00192	-.00181	.00053	.17286
800.530	999.870	-.06628	.03394	.00184	-.00179	.00051	.17292

DATE 02 AUG 75

IA13 SOURCE DATA

PAGE 297

IA13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ213) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -20.000  
 Y = .000 PCIMBR = .000

RUN NO. 589/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.708	601.350	-.03432	.01399	.00321	-.00287	.00055	.17126
1.197	801.770	-.06631	.03389	.01187	-.00180	.00052	.17209
-.705	999.800	-.06625	.03389	.00186	-.00180	.00052	.17258

RUN NO. 690/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
300.430	599.840	-.05506	.02572	.00116	-.00128	.00058	.17054
299.720	799.060	.06624	.03390	.00190	-.00181	.00052	.17268
299.550	998.320	-.06619	.03386	.00187	-.00180	.00052	.17240

RUN NO. 683/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.560	400.190	-.03460	.01324	-.00669	.00361	.00094	.17118
600.820	601.100	-.06623	.03384	.00187	-.00179	.00052	.17150
600.990	801.290	-.06621	.03389	.00188	-.00180	.00052	.17273
599.260	999.760	-.06623	.03388	.00186	-.00180	.00051	.17202

RUN NO. 684/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
899.950	398.100	-.06229	.03089	.00088	-.00101	.00058	.17004
900.060	599.700	-.06625	.03389	.00194	-.00181	.00052	.17249
900.960	801.570	-.06625	.03390	.00187	-.00180	.00052	.17265
900.050	998.640	-.06634	.03395	.00192	-.00181	.00052	.17280

IA13 SRB(SB) W/O PLUMES SEPARATING FROM ORTIO

(RTJ214) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = -20.000  
Y = 200.000 PCMMBR = .000

RUN NO. 692/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
-101	599.870	-.03987	.01541	-.00540	.00333	.00089	.18932
-148	793.570	-.06634	.03383	.00185	-.00180	.00052	.17176
-487	993.740	-.06626	.03390	.00191	-.00179	.00051	.17255

RUN NO. 691/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
300.430	600.280	-.06587	.03368	.00184	-.00179	.00052	.17082
300.890	601.030	-.06629	.03390	.00184	-.00179	.00051	.17269
300.540	1000.200	-.06630	.03390	.00183	-.00179	.00051	.17258

RUN NO. 688/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
598.860	397.820	-.05794	.02757	-.00462	.00318	.00083	.16920
600.680	600.230	-.06635	.03388	.00188	-.00181	.00052	.17203
601.000	600.920	-.06644	.03395	.00183	-.00179	.00051	.17271
599.380	999.840	-.06639	.03394	.00189	-.00180	.00052	.17264

RUN NO. 685/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
899.400	200.520	-.06480	.03282	.00029	-.00051	.00080	.16889
900.660	300.030	-.06608	.03378	.00199	-.00189	.00051	.17073
900.890	400.230	-.06624	.03360	.00182	-.00179	.00052	.17029
900.670	600.010	-.06627	.03390	.00185	-.00180	.00052	.17267
901.000	800.750	-.06632	.03392	.00188	-.00180	.00052	.17269
899.530	999.710	-.06629	.03391	.00188	-.00180	.00052	.17265

DATE 02 AUG 75

1A13 SOURCE DATA

PAGE 298

1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORTIO

(RTJ215) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -20.000  
 Y = 400.000 PCMBR = .000

RUN NO. 694/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
.398	600.280	-.06438	.03235	.00130	-.00131	.00056	.16791
.854	800.880	-.06638	.03384	.00181	-.00180	.00051	.17176
-.581	999.840	-.06834	.03392	.00188	-.00179	.00051	.17258

RUN NO. 693/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
299.860	399.850	-.06383	.03183	-.00079	.00030	.00065	.16806
300.470	600.190	-.06515	.03308	.00177	-.00176	.00050	.16887
300.890	800.700	-.06629	.03391	.00177	-.00177	.00050	.17276
299.420	999.900	-.06631	.03392	.00176	-.00177	.00050	.17269

RUN NO. 687/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
600.710	200.460	-.06842	.03344	.00202	-.00193	.00050	.16703
600.170	300.280	-.06614	.03338	.00191	-.00181	.00052	.16824
599.970	399.550	-.06810	.03317	.00184	-.00178	.00051	.16916
600.680	600.170	-.06605	.03383	.00188	-.00179	.00052	.17248
600.840	800.720	-.06625	.03391	.00188	-.00180	.00052	.17270
599.450	999.850	-.06627	.03390	.00187	-.00179	.00052	.17269

RUN NO. 686/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CBL	CA
899.920	199.990	-.06601	.03258	.00182	-.00178	.00051	.16752
900.840	300.060	-.06606	.03298	.00185	-.00179	.00051	.16885
901.040	400.150	-.06636	.03389	.00197	-.00182	.00053	.17244
900.710	600.340	-.06618	.03388	.00196	-.00182	.00053	.17247
800.390	799.980	-.06634	.03395	.00199	-.00183	.00053	.17295
900.360	999.450	-.06627	.03390	.00195	-.00182	.00052	.17268



1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09110

(RTJ216) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -20.000  
 Y = 800.000 PCHMR = .000

RUN NO. 695/ 0 RN/L = 6.62

X Z CN CLM CY CYN CA  
 -.666 799.940 -.06632 .03391 .00192 -.00181 .17262

RUN NO. 696/ 0 RN/L = 6.62

X Z CN CLM CY CYN CA  
 300.520 800.230 -.06626 .03391 .00193 -.00181 .17254

RUN NO. 697/ 0 RN/L = 6.62

X Z CN CLM CY CYN CA  
 600.600 800.260 -.06629 .03393 .00191 -.00181 .17269

RUN NO. 698/ 0 RN/L = 6.62

X Z CN CLM CY CYN CA  
 900.780 900.230 -.06621 .03388 .00194 -.00181 .17256

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09110

(RTJ217) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = 5.000  
 Y = .000 PCHMR = .000

RUN NO. 699/ 0 RN/L = 6.62

X Z CN CLM CY CYN CA  
 .467 801.410 -.04210 .01879 -.02059 .01284 .17947  
 .624 801.540 -.06632 .03363 .00188 -.00179 .16992  
 -.130 999.800 -.06622 .03396 .00190 -.00180 .17287

RUN NO. 702/ 0 RN/L = 6.62

X Z CN CLM CY CYN CA  
 900.200 599.110 -.06615 .03394 .00178 -.00176 .17279  
 901.130 801.610 -.06612 .03395 .00183 -.00178 .17291  
 900.240 999.690 -.06617 .03397 .00180 -.00178 .17309

(RTJ218) ( 31 JUL 75 )

1A13 SR8(58) W/O PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 700/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
-1.262	598.770	-.06623	.03389	.00171	-.00174	.00053	.17214
-.079	799.350	-.06626	.03398	.00186	-.00180	.00053	.17308
-.067	999.190	-.06621	.03396	.00186	-.00180	.00053	.17303

RUN NO. 703/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
901.283	602.910	-.06608	.03394	.00180	-.00177	.00052	.17293
900.530	800.360	-.06609	.03393	.00181	-.00177	.00052	.17283
900.240	999.050	-.06606	.03393	.00178	-.00177	.00052	.17290

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 701/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
.225	600.380	-.06624	.03398	.00181	-.00178	.00053	.17309
.210	800.340	-.06621	.03398	.00185	-.00179	.00053	.17307
-.010	999.600	-.06618	.03396	.00183	-.00179	.00053	.17289

RUN NO. 704/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN	CBL	CA
900.800	601.300	-.06623	.03399	.00189	-.00174	.00051	.17306
901.020	801.350	-.06608	.03391	.00173	-.00176	.00052	.17270
900.210	998.990	-.06511	.03394	.00177	-.00177	.00052	.17292

(RTJ219) ( 31 JUL 75 )

1A13 SR8(58) W/O PLUMES SEPARATING FROM 09T10

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = 5.000  
 Y = 200.000 PCMR = .000

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = 5.000  
 Y = 400.000 PCMR = .000

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 08T10

(RTJ220) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -5.000  
 Y = .000 PCMR = .000

RUN NO. 714/ 0 RN/L = 6.63

X Z CN CLM  
 .590 801.370 -.05506 .02524  
 -.096 999.670 -.06602 .03348

CY CYN CBL CA  
 -.00057 .00022 .00074 .16469  
 .00196 -.00182 .00054 .17016

RUN NO. 713/ 0 RN/L = 6.63

X Z CN CLM  
 300.870 801.110 -.06532 .03262  
 299.920 999.600 -.06594 .03388

CY CYN CBL CA  
 .00194 -.00180 .00053 .16734  
 .00191 -.00181 .00053 .17281

RUN NO. 705/ 0 RN/L = 6.63

X Z CN CLM  
 600.220 599.870 -.06568 .03357  
 600.820 801.040 -.06610 .03391  
 600.070 999.690 -.06607 .03393

CY CYN CBL CA  
 .00186 -.00178 .00053 .17101  
 .00180 -.00179 .00052 .17249  
 .00183 -.00179 .00053 .17290

RUN NO. 706/ 0 RN/L = 6.63

X Z CN CLM  
 900.630 600.420 -.06609 .03368  
 901.730 803.000 -.06601 .03393  
 900.320 999.640 -.06597 .03399

CY CYN CBL CA  
 .00183 -.00179 .00053 .17118  
 .00192 -.00180 .00053 .17301  
 .00194 -.00179 .00052 .17292

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -5.000  
 Y = .000 PCMR = .000

RUN NO. 715/ 0 RN/L = 6.63

X Z CN CLM  
 .05, 799.540 -.06610 .03380  
 -.207 999.240 -.06600 .03386

CY CYN CBL CA  
 .00192 -.00182 .00054 .16919  
 .00196 -.00183 .00054 .17234

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ221) (31 JUL 75)

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBTIO

(RTJ221) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -5.000  
Y = 200.000 PCMR = .000

RUN NO. 711/ 0 RN/L = 6.63

X Z CN CLM  
300.670 800.820 -.06591 .03273  
300.950 801.020 -.06573 .03284  
300.380 999.640 -.06595 .03368

CY CYN  
.00188 -.00186  
.00186 -.00178  
.00186 -.00180

CBL CA  
.00052 .16619  
.00053 .16855  
.00053 .17279

RUN NO. 708/ 0 RN/L = 6.63

X Z CN CLM  
600.260 999.720 -.06571 .03280  
600.120 799.370 -.06601 .03391  
600.130 999.290 -.06602 .03391

CY CYN  
.00173 -.00175  
.00184 -.00179  
.00185 -.00179

CBL CA  
.00052 .16867  
.00052 .17290  
.00052 .17292

RUN NO. 707/ 0 RN/L = 6.63

X Z CN CLM  
900.950 601.300 -.06595 .03390  
900.850 801.170 -.06596 .03389  
900.500 999.840 -.06596 .03389

CY CYN  
.00183 -.00179  
.00182 -.00179  
.00184 -.00179

CBL CA  
.00052 .17287  
.00052 .17283  
.00053 .17297

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -5.000  
Y = 400.000 PCMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBTIO

(RTJ222) ( 31 JUL 75 )

RUN NO. 716/ 0 RN/L = 6.62

X Z CN CLM  
.239 600.590 -.06590 .03284  
.606 800.990 -.06606 .03387  
-.136 999.760 -.06595 .03368

CY CYN  
.00179 -.00176  
.00186 -.00180  
.00191 -.00181

CBL CA  
.00052 .16846  
.00053 .17241  
.00053 .17281

RUN NO. 712/ 0 RN/L = 6.62

X Z CN CLM  
300.020 599.150 -.06612 .03352  
300.150 799.910 -.06598 .03369  
300.120 999.460 -.06598 .03368

CY CYN  
.00188 -.00180  
.00197 -.00182  
.00194 -.00182

CBL CA  
.00053 .17050  
.00054 .17288  
.00054 .17293

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ222) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 709/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CA
600.770	600.960	-.06596	.03389	.00180	-.00178	.00053
600.850	801.120	-.06600	.03391	.00188	-.00180	.00052
600.370	999.500	-.06600	.03391	.00188	-.00180	.00053

RUN NO. 710/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CA
900.750	600.850	-.06600	.03392	.00182	-.00179	.00053
900.030	799.150	-.06593	.03388	.00182	-.00178	.00052
900.320	999.420	-.06597	.03390	.00185	-.00179	.00053

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -5.000  
Y = 400.000 PCMMR = .000

CBL  
.00053  
.00052  
.00053

CBL  
.00053  
.00052  
.00053

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 717/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CA
-.011	799.880	-.06597	.03388	.00189	-.00181	.00053

RUN NO. 718/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CA
300.440	800.240	-.06590	.03387	.00193	-.00182	.00053

RUN NO. 719/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN	CA
600.630	800.500	-.06596	.03390	.00196	-.00183	.00054

RUN NO. 720/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN	CA
900.740	800.700	-.06585	.03383	.00195	-.00182	.00053

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -5.000  
Y = 800.000 PCMMR = .000

CBL  
.00053  
.00053

CBL  
.00053  
.00053

CBL  
.00054  
.00053

CBL  
.00053  
.00053

(RTJ223) ( 31 JUL 75 )

DATE 02 AUG 75 1A13 SOURCE DATA

1A13 SRB(S6) W/O PLUMES SEPARATING FROM ORTIO (RTJ224) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XRRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZRRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 721/ 0 RN/L = 6.63

X Z CN CLM CY CYN CBL CA  
 -.329 799.910 -.06571 .03379 .00186 -.00180 .00053 .17257

RUN NO. 722/ 0 RN/L = 6.63

X Z CN CLM CY CYN CBL CA  
 300.580 800.510 -.06577 .03382 .00185 -.00179 .00052 .17268

RUN NO. 723/ 0 RN/L = 6.63

X Z CN CLM CY CYN CBL CA  
 600.800 800.830 -.06584 .03386 .00179 -.00177 .00052 .17284

RUN NO. 724/ 0 RN/L = 6.63

X Z CN CLM CY CYN CBL CA  
 900.920 800.780 -.06581 .03385 .00185 -.00179 .00053 .17288

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -10.000  
 Y = 800.000 PCHEER = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XRRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZRRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 734/ 0 RN/L = 6.58

X Z CN CLM CY CYN CBL CA  
 .643 801.480 -.04228 .01841 -.00073 .00026 .00077 .16332  
 -.450 999.520 -.06526 .03336 .00201 -.00185 .00054 .16915

RUN NO. 733/ 0 RN/L = 6.58

X Z CN CLM CY CYN CBL CA  
 300.660 801.000 -.06521 .03318 .00205 -.00134 .00054 .16804  
 299.570 999.710 -.06514 .03383 .00184 -.00184 .00054 .17221

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -10.000  
 Y = .000 PCHEER = .000

1A13 SRB(S8) W/O PLUMES SEPARATING FROM ORTIO (RTJ225) ( 31 JUL 75 )

ORIGINAL PAGE IS  
 OF POOR QUALITY

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

(RTJ225) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 725/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CA
599.870	598.940	-.06341	.03188	.00148	-.00148	.16969
800.730	800.770	-.06608	.03380	.00181	-.00179	.17078
999.780	999.540	-.06582	.03383	.00184	-.00179	.17268

RUN NO. 726/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN	CA
900.580	800.380	-.06599	.03351	.00191	-.00182	.17051
902.070	803.680	-.06593	.03388	.00185	-.00179	.17274
900.390	999.790	-.06602	.03391	.00188	-.00181	.17294

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

(RTJ226) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 735/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CA
.131	799.630	-.06444	.03287	.00183	-.00169	.16715
-.215	999.280	-.06536	.03327	.00199	-.00183	.16990

RUN NO. 731/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CA
300.460	801.950	-.08143	.03082	.00053	-.00075	.18442
300.640	801.010	-.08561	.03260	.00191	-.00180	.16729
299.790	999.600	-.06587	.03384	.00192	-.00180	.17267

RUN NO. 728/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CA
800.430	800.240	-.08546	.03218	.00180	-.00179	.18055
800.400	800.060	-.08601	.03371	.00194	-.00182	.17136
800.250	999.400	-.06600	.03390	.00197	-.00183	.17287

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -10.000  
 Y = .000 PCMBR = .000

CBL	CA
.00057	.16969
.00052	.17078
.00052	.17268

CBL	CA
.00053	.17051
.00052	.17274
.00053	.17294

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -10.000  
 Y = .000 PCMBR = .000

CBL	CA
.00057	.16715
.00054	.16990

CBL	CA
.00060	.18442
.00053	.16729
.00053	.17267

CBL	CA
.00053	.18055
.00054	.17136
.00054	.17287

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ226) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 727/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CA
900.520	600.370	-.06586	.03307	.00183	-.00179	.16934
900.820	800.790	-.06597	.03388	.00185	-.00180	.17280
900.580	999.640	-.06596	.03389	.00189	-.00181	.17285

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -10.000  
Y = 200.000 PCMBR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ227) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 736/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CA
.595	800.930	-.06510	.03311	.00186	-.00184	.16912
-.232	999.630	-.06514	.03364	.00205	-.00186	.17233

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -10.000  
Y = 400.000 PCMBR = .000

RUN NO. 732/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CA
300.640	801.010	-.06561	.03260	.00191	-.00180	.16729

RUN NO. 729/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CA
600.750	600.990	-.06564	.03255	.00184	-.00178	.16780
600.820	800.980	-.06591	.03387	.00190	-.00181	.17277
600.340	999.620	-.06598	.03389	.00193	-.00182	.17285

RUN NO. 730/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN	CA
900.720	600.760	-.06598	.03388	.00194	-.00183	.17281
900.030	799.310	-.06592	.03386	.00188	-.00180	.17273
900.350	999.610	-.06605	.03391	.00194	-.00182	.17298



1A13 SR8(S8) W/O PLUMES SEPARATING FROM 08T10

(RTJ228) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 737/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CA
.817	801.400	-.03008	.00958	.00756	-.00587	.16919
-1.363	999.410	-.06539	.03318	.00202	-.00195	.16931

RUN NO. 738/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CA
300.300	799.800	-.06520	.03343	.00210	-.00187	.17001
299.780	999.290	-.06536	.03370	.00205	-.00186	.17240

RUN NO. 743/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CA
600.933	800.820	-.06548	.03347	.00199	-.00195	.17064
598.610	999.410	-.06534	.03370	.00196	-.00184	.17247

RUN NO. 744/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CA
900.570	800.180	-.06525	.03368	.00195	-.00184	.17233
900.150	999.820	-.06524	.03367	.00192	-.00183	.17234

1A13 SR8(S8) W/O PLUMES SEPARATING FROM 09T10

(RTJ229) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 740/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CA
.291	800.440	-.01784	-.00170	-.00313	.00178	.16228
-.279	999.240	-.06553	.03338	.00217	-.00193	.16775

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -20.000  
 Y = .000 PCHMR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -20.000  
 Y = .000 PCHMR = .000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

(RTJ229) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 739/ 0 RN/L = 6.60

X	Z	CN	CLM
300.660	800.670	-.06545	.03346
300.250	999.740	-.06552	.03337

RUN NO. 748/ 0 RN/L = 6.60

X	Z	CN	CLM
600.330	800.200	-.06524	.03287
600.140	999.890	-.06520	.03365

RUN NO. 745/ 0 RN/L = 6.60

X	Z	CN	CLM
900.730	800.130	-.06509	.03360
900.480	999.820	-.06523	.03366

IA13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

(RTJ230) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 741/ 0 RN/L = 6.60

X	Z	CN	CLM
586	800.800	-.05154	.02196
1058	999.560	-.06570	.03334

RUN NO. 742/ 0 RN/L = 6.60

X	Z	CN	CLM
300.250	800.360	-.06539	.03332
299.870	999.450	-.06571	.03351

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -20.000  
Y = 200.000 PCMBR = .000

CBL	CA
.00056	.16836
.00056	.17021

CBL	CA
.00054	.16872
.00053	.17234

CBL	CA
.00053	.17214
.00054	.17244

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -20.000  
Y = 400.000 PCMBR = .000

CBL	CA
.00076	.15910
.00055	.16808

CBL	CA
.00055	.16734
.00055	.17051

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM OSTIO

(RTJ230) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 747/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
800.580	800.660	-.06904	.03244	.00198	-.00184	.00054	.18739
600.420	999.743	-.06523	.03368	.00196	-.00183	.00054	.17248

RUN NO. 748/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
900.290	800.230	-.06517	.03368	.00199	-.00184	.00054	.17244
900.520	999.960	-.06521	.03368	.00197	-.00184	.00054	.17239

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OSTIO

(RTJ231) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 749/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
-1.218	799.600	-.06489	.03218	.00199	-.00185	.00054	.16649

RUN NO. 750/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
300.610	800.660	-.06524	.03368	.00215	-.00189	.00056	.17233

RUN NO. 751/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN	CBL	CA
600.610	800.410	-.06525	.03358	.00209	-.00188	.00055	.17247

RUN NO. 752/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN	CBL	CA
900.560	800.510	-.06512	.03363	.00210	-.00187	.00055	.17234

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -20.000  
 Y = 400.000 PCMR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -20.000  
 Y = 800.000 PCMR = .000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13,SRB(SB)WITH PLUMES SEPARATING FROM 29T10

(RTJ232) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 26.901  
 ALPHA = .000 BETA = 5.000  
 DALPHA = 5.000 DBETA = 5.000  
 X .000 PC448 = 1500.000

RUN NO. 853/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN	CBL	CA
201.850	-.212	.020	-.02898	-.23927	-.00773	-.00394	.10721
201.440	.003	49.980	-.02527	-.31956	-.02632	.00360	.11260
200.450	-.484	97.865	.02850	-.38750	-.03923	.00932	.12199
201.340	.926	147.510	.09815	-.42000	-.04020	.00693	.12825
200.720	.893	200.060	.15714	-.40483	-.03300	.00328	.13814
199.820	.296	299.900	.20267	-.33332	-.02239	-.00278	.15891
199.300	-.058	400.140	.18072	-.27982	.00146	-.01076	.16862
200.220	-.687	599.770	.16861	-.21652	.04107	-.02335	.16640

RUN NO. 854/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN	CBL	CA
201.850	-.827	-.09404	.01867	-.26818	-.00774	-.02012	.17684
201.440	50.794	-.06939	.01631	-.29622	-.00854	-.02222	.17205
200.450	100.860	-.73026	.01288	-.32048	-.00591	-.02135	.16477
201.340	150.740	.00232	.00839	-.34791	-.00536	-.02038	.15577
200.720	200.790	.02696	.01240	-.37555	-.00051	-.02152	.15335
199.820	301.700	.06738	.02290	-.40338	.02153	-.02594	.15974
199.300	400.480	.09019	.02324	-.40759	.04576	-.03021	.17499
200.220	599.820	.18029	-.03198	-.35268	.08200	-.03092	.18327

RUN NO. 855/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.180	-.242	-.12290	.03320	-.32261	.03845	-.02828	.19390
399.720	49.698	-.11183	.03092	-.34305	.04341	-.03139	.19174
400.090	99.521	.10024	.03019	-.36375	.04982	-.03404	.18842
399.790	149.480	-.08440	.02880	-.38288	.05745	-.03623	.18449
400.280	199.110	-.06256	.02569	-.39716	.06558	-.03778	.18127
400.610	299.000	-.00951	.01452	-.41437	.08536	-.03923	.17879
402.110	398.910	.04309	-.00196	-.43627	.10957	-.04207	.18205
402.070	598.380	.16656	-.05955	-.43234	.14610	-.04178	.19164

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 OF POOR QUALITY

DATE 02 AUG 75

(RTJ233) ( 31 JUL 75 )

IA13.SRB(S) WITH PLUMES SEPARATING FROM OCT10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 658/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
.415	.359	-.00749	-.05898	-.26137	-.02477	.00335	.09557
1.202	50.065	-.01947	-.02237	-.37957	-.04083	.00884	.11247
.699	99.791	.05131	.00228	-.46505	-.05081	.00784	.12943
.173	149.840	.13640	.02198	-.45511	-.04832	.00793	.13003
-1.278	202.170	.19693	.03416	-.40866	-.03979	.00489	.13591
.007	299.740	.22122	.04515	-.32427	-.02502	-.00258	.15271
.334	399.760	.19682	.04298	-.28128	-.00140	-.01102	.16266
.398	599.880	.17452	.00705	-.21484	.03939	-.02198	.15859

RUN NO. 657/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
199.680	-.711	-.07960	.01216	-.25105	-.00916	-.01753	.16326
199.500	49.019	-.05469	.00943	-.28549	-.01139	-.01910	.15898
199.450	99.160	-.01173	.00200	-.31135	-.01439	-.01752	.15022
200.040	149.010	.02066	-.00002	-.34535	-.01344	-.01831	.14411
200.430	198.220	.04713	.00387	-.36533	-.00769	-.01871	.14291
200.960	298.970	.08527	.01677	-.39236	.01210	-.02348	.15057
199.630	400.010	.10349	.02218	-.39449	.03646	-.02766	.16688
201.480	601.540	.16733	-.02136	-.34408	.07226	-.03063	.17854

RUN NO. 656/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
402.690	.048	-.12997	.03383	-.30638	.02547	-.02590	.18591
400.650	50.201	-.11095	.02784	-.32702	.02849	-.02927	.18696
400.250	100.420	-.09579	.02635	-.35032	.03361	-.03204	.18569
400.220	150.570	-.08067	.02677	-.37161	.04001	-.03379	.18215
401.100	200.430	-.06182	.02679	-.39051	.04931	-.03485	.17799
399.650	301.240	-.00844	.02127	-.41380	.06969	-.03565	.17401
399.930	400.830	.04509	.00658	-.42980	.09422	-.03857	.17861
400.120	599.890	.15667	-.04918	-.42070	.13441	-.04077	.18742

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DLPHA = 5.000 DBETA = .000  
 X = .000 PCMH8 = 1500.000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13.SRB(S)WITH PLUMES SEPARATING FROM 08T10

(RTJ23N) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XMRP = 1082.0000 IN. XT  
 LREF = 1800.3000 INCHES YMRP = .0000 IN. YT  
 SREF = 1800.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DIALPHA = 5.000 DBETA = -5.000  
 X .000 PCHWB = 1500.000

RUN NO. 899/ 0 RM/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
.371	400.210	.1093	.04882	-.26900	-.00508	-.00963	.15573
-.164	600.150	.16926	.01311	-.20422	.03270	-.01806	.14846

RUN NO. 902/ 0 RM/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
199.450	-.538	-.02260	-.03078	-.23901	-.01289	-.01481	.14037
199.250	49.110	-.01848	-.01808	-.26938	-.01722	-.01476	.13579
193.020	98.682	.01637	-.02321	-.31704	-.01998	-.01523	.12656
200.090	148.990	.04739	-.01831	-.35619	-.01903	-.01628	.12675
201.340	198.560	.07243	-.01051	-.36997	-.01328	-.01699	.12957
201.830	299.060	.10636	.00108	-.37852	.00407	-.01736	.13510
200.100	299.910	.12071	.01430	-.37880	.02423	-.02216	.15173
200.720	599.670	.15350	-.00753	-.32689	.06480	-.03013	.16891

RUN NO. 903/ 0 RM/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
398.620	-1.232	-.13430	.03356	-.29047	.02217	-.02167	.17347
401.040	50.264	-.11743	.02858	-.31541	.02083	-.02503	.17544
400.750	100.320	-.10157	.02686	-.33891	.02199	-.02850	.17718
400.700	150.330	-.07978	.02305	-.36004	.02669	-.03137	.17734
400.670	200.530	-.06113	.02225	-.38013	.03495	-.03349	.17400
400.650	301.290	-.01218	.01956	-.40780	.05377	-.03425	.16714
400.660	400.850	.03500	.01270	-.43403	.07737	-.03668	.17358
400.340	599.980	.15501	-.03620	-.41056	.12331	-.03759	.17817

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0030 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = 5.000 DBETA = -10.000  
 X = .000 PCMPB = 1500.000

RUN NO. 900/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
2.246	400.690	.21775	.05420	-.25109	-.00591	-.00952	.15918
1.050	599.796	.14947	.02221	.19453	.02874	-.01783	.15125

RUN NO. 925/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
201.330	198.420	.10183	-.03279	-.35246	-.02323	-.01190	.11531
202.070	299.500	.12977	.00061	-.35793	-.00619	-.01534	.12997
200.470	399.840	.12032	.01065	-.36182	-.01466	-.01710	.14553
201.050	599.720	.16039	.00110	-.32000	.05756	-.02752	.16662

RUN NO. 924/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.940	-.201	-.04026	-.04744	-.26559	.00764	-.01712	.16235
399.670	49.704	-.01868	-.05838	-.28945	.00825	-.02045	.16383
399.840	99.257	-.01485	-.05400	-.31107	.01004	-.02329	.16407
399.720	149.480	-.05713	-.00400	-.33062	.01406	-.02637	.16541
400.190	198.640	-.05973	.01064	-.35380	.01935	-.02784	.16977
400.390	298.340	-.01592	.00945	-.40330	.03867	-.03112	.16449
400.410	399.820	.04054	.00653	-.42482	.06164	-.03448	.16477
400.860	599.690	.14163	-.02605	-.42001	.10753	-.03532	.17350

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0030 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = 5.000 DBETA = -20.000  
 X = .000 PCMPB = 1500.000

RUN NO. 901/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
.922	399.930	.23987	.08182	-.24428	-.00052	-.01098	.17473
.412	599.830	.17045	.04378	-.19050	.02609	-.01463	.16414

DATE 02 AUG 75 1A13 SOURCE DATA

(RTJ236) ( 31 JUL 75 ) 1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 942/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.280	399.800	.13388	.02114	-.33452	.00505	-.01431	.15416
201.180	550.000	.13303	.01954	-.31300	.04209	-.02552	.17100

RUN NO. 943/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.820	139.900	.10242	-.13133	-.27726	-.02937	-.00918	.13164
401.370	297.990	.07208	-.04936	-.36467	-.00586	-.01613	.13129
400.860	599.970	.09167	-.01537	-.38984	.02718	-.02320	.14446
401.420	599.700	.11891	-.00489	-.38488	.09091	-.03334	.16623

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = 5.000  
DALPHA = 5.000 DBETA = -20.000  
X = .000 PCHMB = 1500.000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 959/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
.273	.078	-.04688	-.01313	-.23381	.00890	-.00845	.10189
-.047	50.068	-.04103	-.00760	-.30969	-.01976	.00178	.10639
-.069	100.280	.00113	.00666	-.39489	-.03721	.00813	.11631
-.385	150.270	.07715	.01938	-.43731	-.04093	.00875	.12146
.252	200.400	.14273	.03040	-.42361	-.03771	.00604	.12947
.140	249.990	.20614	.04032	-.34192	-.02999	-.00020	.14561
.543	400.060	.20157	.04771	-.28542	-.01294	-.00747	.16386
.167	559.910	.16953	.01563	-.22699	.03206	-.02060	.15873
.588	799.970	.21641	-.05950	-.16731	.04829	-.01968	.17188
.103	959.820	.21891	-.11401	-.15155	.04807	-.01113	.18059

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = 5.000  
DALPHA = .000 DBETA = 5.000  
X = .000 PCHMB = 1500.000

(RTJ237) ( 31 JUL 75 ) 1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10



1A13, SR8158) WITH PLUMES SEPARATING FROM 09T10 (RTJ237) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 RREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 48.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = 5.000  
 X = .000 PCHMB = 1500.000

RUN NO. 860/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
202.130	-0.036	-0.09504	.01992	-.24421	-.00410	-.01616	.16839
201.160	50.206	-.09050	.02172	-.28044	-.00518	-.01982	.17166
200.700	100.900	-.05574	.01959	-.30848	-.00438	-.01988	.16235
201.050	150.840	-.01780	.01163	-.33598	-.00765	-.01756	.15135
200.820	200.330	.01689	.01079	-.36607	-.00904	-.01693	.14615
200.690	300.050	.07161	.01981	-.39564	.00505	-.02084	.14979
199.170	400.990	.10057	.02634	-.40083	.03049	-.02741	.16221
200.420	599.830	.15601	-.01280	-.36010	.06645	-.03022	.17909
200.110	799.920	.23791	-.08215	-.29577	.09377	-.03306	.18508
200.110	999.780	.26082	-.14974	-.23529	.06654	-.02407	.18450

RUN NO. 861/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.400	-1.198	-1.13854	.03490	-.29647	.02353	-.02379	.20039
399.840	40.844	-1.12661	.03193	-.32310	.02779	-.02849	.19809
399.980	99.458	-1.10824	.02785	-.34678	.03309	-.03243	.19645
399.760	149.640	-.08734	.02519	-.36733	.03772	-.03545	.19400
400.080	198.850	-.06572	.02455	-.38695	.04539	-.03714	.18888
400.510	298.850	-.02667	.02259	-.42012	.06431	-.03745	.17890
400.290	399.980	.03097	.01222	-.44293	.08778	-.03785	.17871
402.770	500.500	.15229	-.04197	-.43833	.13492	-.04104	.18879
402.070	801.410	.25390	-.12665	-.36376	.13690	-.03361	.19107
400.440	999.120	.25313	-.16471	-.27687	.11499	-.03762	.18168

DATE 02 AUG 75

IA13 SOURCE DATA

PAGE 317

IA13,SR8(SB)WITH PLUMES SEPARATING FROM 09110

(RTJ238) (31 JUL 75)

## REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1230.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 864/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
.318	-1.122	.01562	-.09468	-.24609	-.01029	-.00434	.08747
1.612	50.180	.03813	-.09684	-.36670	-.04060	.00971	.09611
-.153	100.120	.09692	-.07192	-.45627	-.05234	.01047	.11624
.779	149.700	.17531	-.04587	-.46174	-.05364	.01101	.12070
.259	199.650	.23204	-.02371	-.42658	-.04786	.00910	.12595
.518	299.630	.23692	.03348	-.33159	-.03461	.00024	.13945
.108	399.570	.21750	.04588	-.27792	-.01624	-.00739	.15511
.610	599.830	.17739	.01494	-.21773	-.02683	-.01907	.15023
.147	800.020	.20531	-.04077	-.18405	.04507	-.01030	.10258
.479	999.920	.22543	-.11140	-.14911	.04507	-.01036	.18247

RUN NO. 863/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
198.800	-.134	-.09687	.02095	-.24348	.00434	-.01858	.15702
199.930	49.194	-.05376	.01577	-.27531	-.00467	-.01918	.15535
199.400	99.324	-.03999	.00844	-.30383	-.00770	-.01674	.14638
199.470	149.160	-.00044	.00028	-.32815	-.01477	-.01473	.13715
199.720	197.930	.03056	.00091	-.35183	-.01661	-.01333	.13242
201.520	298.900	.08541	.01102	-.38199	-.00657	-.01568	.13850
200.150	400.050	.11096	.02033	-.39411	.01993	-.02322	.15329
200.080	599.920	.14333	-.02249	-.34549	.05577	-.02028	.17617
200.830	799.900	.22473	-.05784	-.28433	.08523	-.03146	.18041
199.880	1000.700	.26381	-.14383	-.23555	.08466	-.02499	.18469

RUN NO. 862/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
402.490	-.337	-.11809	.03506	-.29514	.02049	-.02228	.18804
401.230	50.437	-.12361	.03366	-.32089	.02110	-.02547	.18722
400.810	100.350	-.10907	.03355	-.34172	.02418	-.02854	.18594
400.190	150.220	-.09153	.03098	-.35864	.02833	-.03105	.18472
401.020	200.480	-.07450	.02914	-.37517	.03423	-.03248	.18204
400.850	301.180	-.03304	.02533	-.41266	.05131	-.03363	.17338
399.770	401.270	.02865	.01698	-.42872	.07205	-.03489	.17347
400.110	599.450	.13536	-.02898	-.42505	.12049	-.03902	.16982
400.610	799.950	.23385	-.10576	-.36739	.13297	-.03556	.18980
397.620	999.500	.26327	-.16506	-.28544	.14520	-.03414	.18493

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = .000  
 X = .000 PCMB = 1500.000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ238) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 883/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.280	799.770	.16434	-.12031	-.34732	.17221	-.04295	.18687

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = .000  
 X = .000 PCMRB = 1500.000

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ239) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 906/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
.668	400.140	.22323	.04896	-.26534	-.02181	-.00688	.14756
.411	599.870	.18282	.01553	-.20841	.02315	-.01676	.14106
.436	799.920	.13893	-.04226	-.16096	.04192	-.01755	.15925
.364	999.730	.22351	-.10571	-.14550	.04362	-.01072	.17800

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = -5.000  
 X = .000 PCMRB = 1500.000

RUN NO. 904/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
198.470	-.244	-.01946	-.04832	-.23836	.01248	-.02127	.13514
198.490	49.298	.00963	-.06818	-.27437	.00159	-.01990	.13047
198.580	98.739	.05185	-.08128	-.30250	-.01659	-.01410	.12456
200.340	148.810	.08220	-.07226	-.34504	-.01970	-.01452	.11803
201.070	198.520	.09974	-.05009	-.35939	-.02022	-.01306	.11579
201.410	298.620	.13103	-.02738	-.35720	-.01593	-.01071	.11887
200.360	399.940	.13839	.00335	-.36095	.00532	-.01730	.13505
200.390	599.920	.14211	-.00355	-.33116	.04924	-.02682	.16219
200.240	799.790	.21240	-.06131	-.27859	.07969	-.02972	.16932
199.910	999.850	.26332	-.13967	-.23764	.08264	-.02471	.17923

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,SR8(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ239) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 905/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.250	-1.344	-1.14101	.04074	-.28548	.02814	-.02040	.16857
401.240	50.344	-1.11960	.03297	-.31119	.02382	-.02369	.16995
400.460	100.300	-1.10632	.03132	-.33014	.02196	-.02632	.17129
400.520	150.270	-.09997	.03350	-.34710	.02245	-.02795	.17169
400.870	200.310	-.08434	.03059	-.36489	.02561	-.02909	.16912
400.610	301.270	-.03308	.02246	-.39714	.03704	-.02931	.15558
399.830	401.410	.32714	.01615	-.41067	.05387	-.03072	.16035
400.100	599.980	.12897	-.02078	-.40602	.10737	-.03606	.17156
400.370	799.940	.21920	-.09209	-.36179	.13149	-.03708	.18059
400.220	999.930	.26515	-.16468	-.28791	.11646	-.03208	.18093

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = -5.000  
 X = .000 PCHMB = 1500.000

## PARAMETRIC DATA

RUN NO. 890/ C RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
799.800	798.490	.16834	-.11838	-.36195	.17798	-.04334	.18823

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 909/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
1.550	399.530	.23763	.04650	-.24067	-.02694	-.00574	.15666
2.061	599.940	.16104	.02233	-.19357	.01529	-.01499	.14713
1.015	799.790	.19950	-.04346	-.16191	.03769	-.01560	.16323
1.583	999.830	.24571	-.11741	-.15997	.04684	-.01344	.17849

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = -10.000  
 X = .000 PCHMB = 1500.000

## PARAMETRIC DATA

1A13,SR8(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ240) ( 31 JUL 75 )

ORIGINAL PAGE IS  
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IA13 SOURCE DATA

PAGE 320

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ240) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = -10.000  
 X = .000 PCH#8 = 1500.000

RUN NO. 526/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.950	198.580	.22460	-.15602	-.32447	-.02851	-.00404	.10492
201.330	299.160	.22436	-.09693	-.33266	-.02620	-.00678	.11402
200.820	399.880	.16506	-.02888	-.33995	-.01018	-.01054	.12573
200.840	599.830	.15969	-.00199	-.31483	.04296	-.07229	.15543
200.210	799.810	.20369	-.04977	-.26470	.07161	-.01687	.16774
200.240	999.850	.27536	-.14454	-.23702	.08368	-.02475	.18207

RUN NO. 527/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.530	-.053	-.05851	-.02591	-.31104	.05963	-.03300	.15093
399.240	49.998	-.02692	-.05029	-.30702	.04172	-.03098	.15549
399.410	99.967	-.02171	-.05195	-.30476	.02318	-.02717	.15788
399.180	149.780	-.01829	-.05224	-.31333	.00857	-.02152	.15742
399.570	198.350	-.01421	-.04856	-.34021	.00884	-.02218	.15669
400.820	298.200	-.00636	-.01529	-.39057	.02103	-.02557	.15053
400.540	400.010	.04740	-.00910	-.41211	.03807	-.02768	.14766
400.230	599.850	.13287	-.01849	-.40858	.09004	-.03259	.16497
400.710	799.940	.21377	-.07448	-.35300	.12698	-.03747	.17812
398.830	999.920	.28014	-.16686	-.28288	.11358	-.03021	.18503

RUN NO. 891/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
802.180	800.500	.16567	-.11224	-.37240	.17813	-.04323	.18759

DATE 02 AUG 75

IA13 SOURCE DATA

PAGE 321

IA13.SRB(SB)WITH PLINES SEPARATING FROM 08T10 (RTJEN1) (31 JUL 75)

## REFERENCE DATA

SREF = 2630.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = -20.000  
 X = .000 PCMBG = 1500.000

RUN NO. 910/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
.907	399.800	.23753	.08047	-.23984	-.01245	-.00845	.18215
1.050	599.840	.17423	.05509	-.19633	.02075	-.01544	.16595
.750	799.780	.18108	-.00817	-.15927	.03385	-.01628	.16978
.108	999.820	.23263	-.08727	-.14594	.04192	-.01434	.17955

RUN NO. 941/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.800	399.970	.21584	-.05640	-.27101	-.04221	.00653	.14515
201.000	599.740	.13271	.01752	-.31731	.02836	-.02344	.16027
202.250	801.070	.17224	-.02490	-.29174	.06788	-.02877	.17485
200.710	1000.000	.25344	-.11062	-.25472	.08195	-.02657	.18506

RUN NO. 940/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
401.890	298.640	.18818	-.16286	-.32255	-.03165	-.00892	.10804
400.580	399.960	.17975	-.11532	-.33518	-.00689	-.01101	.12885
400.450	599.950	.13414	-.03729	-.36754	.06379	-.02855	.14761
400.560	799.730	.16955	-.05056	-.37016	.12263	-.03881	.17191
400.840	1000.100	.25657	-.14135	-.31324	.12030	-.02870	.18766

RUN NO. 898/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
801.920	798.990	.15724	-.10261	-.39801	.19686	-.04619	.17839

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13, SR8(SB) WITH PLUMES SEPARATING FROM 09T10 (RTJ242) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SO. FT. YMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -5.000 DBETA = 5.000  
 X = .000 PCMB = 1500.000

RUN NO. 865/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
-.098	50.193	-.06740	-.00041	-.32412	.01560	-.00873	.10619
-.101	100.280	-.04541	.01537	-.42608	-.01242	.00084	.11099
.304	150.140	.04678	.02354	-.46899	-.02585	.00414	.11929
.468	200.300	.12300	.03603	-.45803	-.02801	.00432	.12825
.350	300.180	.20598	.04504	-.35787	-.02605	.00224	.14039
-.299	400.140	.20355	.04980	-.28372	-.01685	-.00462	.15464
.074	600.060	.16498	.02129	-.21744	.01957	-.01782	.15380
.134	799.990	.20280	-.04508	-.16565	.04293	-.01879	.16529
-.713	1000.100	.22660	-.10889	-.15125	.04697	-.01145	.17964

RUN NO. 866/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
199.340	50.796	-.08855	.01765	-.26154	.00126	-.01827	.16763
200.950	100.630	-.07902	.02316	-.30147	.00110	-.01942	.16109
201.610	150.770	-.04620	.01930	-.33548	-.00668	-.01574	.15151
201.640	201.140	-.00774	.01881	-.36746	-.00744	-.01607	.14653
200.760	302.370	.06007	.02581	-.39209	-.00259	-.01638	.14344
199.510	401.360	.09917	.03164	-.38830	.01662	-.02145	.15184
200.490	600.020	.12869	.00550	-.35070	.02222	-.02745	.17610
200.120	799.990	.21262	-.05921	-.28911	.08356	-.03085	.18012
200.150	999.910	.26453	-.14138	-.24065	.08522	-.02551	.18447

RUN NO. 869/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
398.700	-.168	-.13426	.03162	-.28790	.01658	-.02164	.20353
399.440	49.672	-.12258	.03088	-.31692	.01798	-.02554	.20389
399.570	99.696	-.10752	.03051	-.34362	.02119	-.02936	.20190
399.940	149.880	-.09049	.02899	-.36283	.0231	-.03213	.19935
399.850	199.170	-.07633	.02711	-.37988	.03082	-.03369	.19545
400.350	298.610	-.04103	.02703	-.42196	.04892	-.03439	.18353
400.070	400.210	.02059	.02100	-.43808	.06886	-.03458	.17945
399.550	600.060	.12770	-.02202	-.42767	.11690	-.03854	.18391
402.510	801.460	.22475	-.09626	-.37259	.13441	-.03681	.19179
400.210	1000.100	.26383	-.16385	-.28870	.11556	-.03287	.18651

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13.988(SB)WITH PLUMES SEPARATING FROM ORT10

(RTJEN3) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 50. FT. XREF = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YREF = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZREF = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 0668/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
1.627	50.165	.32648	-.11484	-.42782	.03411	-.01737	.07793
-.038	100.150	.13401	-.14437	-.48552	-.01394	-.00763	.10466
-.394	150.100	.24398	-.13157	-.53251	-.02638	-.00093	.12578
-.022	199.870	.32635	-.11814	-.47465	-.03053	.00531	.13124
-.227	299.780	.37711	-.08968	-.34005	-.03381	.00371	.13504
.448	400.080	.32438	-.05033	-.26288	-.02842	-.00100	.14388
.390	599.890	.20286	-.00454	-.20929	.01668	-.01534	.13824
.038	800.000	.20184	-.04403	-.16114	.03928	-.01665	.15542
-.1455	998.050	.23039	-.10673	-.14491	.04270	-.01076	.17282

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -5.000 DBETA = .000  
 X = .000 PC448 = 1500.000

RUN NO. 867/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
198.630	49.732	-.10749	.02791	-.28091	.03042	-.02889	.15451
198.500	99.150	-.08307	.02133	-.31682	.02114	-.02693	.14863
199.510	148.860	-.04743	.01508	-.34538	.00817	-.02216	.13524
200.220	197.780	.00206	.0158	-.38078	.00109	-.01884	.13124
201.970	299.120	.07888	.01472	-.38094	-.00786	-.01409	.13204
200.510	400.110	.10473	.02078	-.36931	.00674	-.01708	.13698
199.780	600.020	.13235	.00968	-.33618	.04103	-.02467	.17019
199.970	799.530	.20379	-.04875	-.27915	.07453	-.02903	.17427
201.690	1000.100	.26589	-.13389	-.23606	.08101	-.02505	.18244

RUN NO. 872/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
401.150	-.889	-.12354	.02829	-.27230	.01314	-.01864	.19417
400.390	50.354	-.11556	.03089	-.29939	.01422	-.02158	.19340
400.030	100.330	-.11457	.03819	-.32522	.01803	-.02464	.19152
400.370	150.200	-.11108	.04226	-.34939	.02230	-.02765	.18041
400.900	200.360	-.10398	.04089	-.37051	.02610	-.02935	.18447
400.970	301.050	-.06185	.03575	-.41412	.03855	-.03031	.17394
400.410	401.660	.00512	.02688	-.42945	.05400	-.03139	.17178
400.500	599.940	.11425	-.01250	-.42046	.10142	-.03699	.17703
400.480	800.020	.20930	-.07755	-.37298	.12812	-.03813	.18553
359.900	1000.000	.27198	-.15919	-.29434	.11469	-.03027	.18704

RUN NO. 884/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.670	801.480	.16312	-.11359	-.38167	.18864	-.04501	.18993



(RTJ244) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 50.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -5.000 DBETA = -5.000  
 X = .000 PCHEG = 1500.000

RUN NO. 907/ C RN/L = 1.73

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.060	50.028	-.04763	-.02898	-.24871	-.03533	.00363	.13932
198.530	98.932	.01257	-.07565	-.19658	.00817	-.01390	.13290
198.590	148.870	.11992	-.12267	-.15826	.03697	-.01607	.14481
200.210	198.210	.17659	-.13152	-.39734	.01468	-.02511	.10623
201.390	298.670	.20655	-.09982	-.36610	-.02156	-.00770	.11039
200.150	400.080	.22802	-.07811	-.34186	-.01314	-.00941	.11787
200.500	599.990	.15560	-.01758	-.32324	.02924	-.02189	.14775
202.540	801.320	.19339	-.04718	-.28243	.06545	-.02767	.15977
200.490	1000.300	.25906	-.11941	-.23753	.07770	-.02537	.16871

RUN NO. 913/ D RN/L = 1.73

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.400	.003	-.16143	.06115	-.34227	.08573	-.04353	.16952
399.790	49.910	-.15231	.05762	-.33880	.06757	-.03912	.16858
399.690	99.928	-.13885	.05092	-.35082	.06263	-.03978	.16888
399.240	149.890	-.12757	.04447	-.36925	.05750	-.04018	.16712
398.650	198.730	-.11240	.03833	-.38805	.05130	-.03792	.16007
400.370	298.480	-.09507	.02830	-.40588	.03299	-.02669	.14939
400.650	400.170	.00490	.02482	-.41292	.03857	-.02633	.15115
400.280	600.100	.10216	-.00788	-.39716	.08316	-.03344	.16492
402.370	801.210	.18834	-.05420	-.36870	.12072	-.03836	.17238
400.940	1000.200	.26425	-.14855	-.30347	.11477	-.02925	.17860

RUN NO. 913/ D RN/L = 1.73

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.070	799.110	.15702	-.10510	-.40238	.19988	-.04725	.19055

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1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ245) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = 5.000  
DALPHA = -5.000 DBETA = -10.000  
X = 000 PCHWB = 1500.000

RUN NO. 908/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
.366	400.090	.34725	-.05291	-.20842	-.05442	.00961	.15453
.734	559.970	.21463	-.01250	-.17751	-.00534	-.00832	.14106
.601	801.480	.19156	-.03324	-.18975	.03207	-.01457	.14868
1.710	1000.200	.23682	-.09850	-.18449	.04425	-.01452	.16957

RUN NO. 929/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.890	298.480	.36116	-.23236	-.34236	-.02227	-.00662	.10665
200.240	400.100	.35240	-.18392	-.33505	-.02471	-.00023	.10436
200.230	600.010	.22455	-.06386	-.28709	.01849	-.01404	.13634
201.960	801.400	.20326	-.05365	-.27401	.06938	-.02474	.15202
200.550	1000.200	.25937	-.12162	-.25093	.08378	-.02397	.17172

RUN NO. 928/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.640	50.331	-.08899	-.00275	-.32656	.08074	-.03815	.13695
400.060	100.170	-.03978	-.04268	-.33908	.07329	-.04076	.14438
399.120	150.000	.0846	-.08054	-.35017	.06914	-.04309	.14361
398.420	198.720	.074	-.10154	-.39068	.06847	-.04349	.14902
399.900	298.120	.05752	-.08013	-.40429	.03132	-.02895	.13680
400.150	400.200	.12541	-.08059	-.40515	.02179	-.02002	.12566
400.500	600.030	.13981	-.02756	-.38468	.06840	-.02733	.15189
400.830	799.960	.19013	-.05662	-.33435	.12021	-.03755	.16994
400.660	1000.100	.26997	-.14949	-.33025	.11777	-.02776	.17795

RUN NO. 892/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
799.840	801.330	.16330	-.10308	-.39974	.19007	-.04542	.18891

DATE 02 AUG 75

IA13 SOURCE DATA

IA13,SRB(SB)WITH PLUMES SEPARATING FROM OBTIO

(RTJ246) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -5.000 DBETA = -20.000  
 X = .000 PCMB = 1500.000

RUN NO. 911/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
-1.492	399.960	.25151	.05999	-.21248	-.02957	.00340	.18541
.863	599.940	.17314	.04882	-.17532	.01449	-.01308	.13403
-1.050	799.100	.17037	.00897	-.15518	.03342	-.01594	.16687
.052	999.910	.21611	-.07055	-.13600	.04203	-.01505	.17960

RUN NO. 938/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.660	400.120	.31818	-.14366	-.21767	-.08056	.03145	.13756
200.460	600.050	.23744	-.07285	-.26155	-.02357	.00195	.14703
200.040	799.960	.16863	-.01206	-.29305	.04977	-.02517	.16186
200.410	1000.200	.22350	-.07513	-.24014	.07284	-.02671	.17260

RUN NO. 939/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.590	399.940	.33558	-.26687	-.33939	-.01131	-.00024	.08444
400.430	599.940	.23903	-.14853	-.31424	.01367	-.01562	.12009
400.280	799.880	.16988	-.06814	-.35733	.08468	-.03263	.14669
400.970	999.910	.21850	-.10156	-.32208	.10959	-.03071	.16993

RUN NO. 897/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.830	799.100	.12612	-.07977	-.42404	.20347	-.05184	.17222

DATE 02 AUG 75 1A13 SOURCE DATA

1A13,548(58) WITH PLUMES SEPARATING FROM ORBIT

(RTJ247) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOIL = 28.900  
ALPHA = .000 BETA = 5.000  
DALPHA = -10.000 DBETA = 5.000  
X = .000 PCMB = 1500.000

RUN NO. 873/ 0 RV/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
.153	200.380	.09253	.03525	-.52820	.00018	-.00503	.13278
.241	300.200	.22363	.02530	-.43909	.02341	-.01329	.14214
.124	400.170	.26291	-.00482	-.31891	.00964	-.00511	.15236
-.540	600.180	.19863	-.01873	-.21305	.01406	-.01197	.14038
.378	799.870	.19472	-.03890	-.16212	.03084	-.01503	.15224
-.098	1000.300	.23980	-.10884	-.15969	.04561	-.01379	.16458

RUN NO. 874/ 0 RV/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.300	199.850	-.05338	.03775	-.39391	.02188	-.02404	.15163
200.490	300.230	.03666	.03999	-.41495	.00805	-.01790	.14003
199.410	401.650	.08372	.04757	-.39719	.01535	-.01620	.14444
200.140	599.960	.11213	.02853	-.35229	.03832	-.02136	.16926
199.800	799.920	.18566	-.03379	-.28025	.07248	-.02773	.17231
199.870	1000.000	.26134	-.12667	-.24314	.08339	-.02430	.17763

RUN NO. 875/ 0 RV/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.510	.980	-.12159	.02739	-.27378	.00981	-.01891	.20636
400.430	50.671	-.10836	.02905	-.29751	.00536	-.02105	.20732
400.490	100.450	-.10107	.02911	-.31778	.00863	-.02429	.20846
400.930	150.290	-.09597	.02988	-.34055	.01131	-.02754	.20675
400.930	200.360	-.09347	.03105	-.36618	.01661	-.02949	.20129
401.180	300.990	-.06421	.03454	-.42363	.03656	-.03119	.18822
400.260	401.580	-.00150	.02974	-.44212	.05408	-.03206	.18028
399.970	600.070	.09944	-.00292	-.42330	.09642	-.03634	.18230
399.920	800.060	.19505	-.06581	-.37514	.12814	-.03120	.19020
401.120	1000.000	.26882	-.15488	-.29734	.11647	-.02914	.18838

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 08T10

(RTJ248) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -10.000 DBETA = .000  
 X = .000 PCMB = 1500.000

RUN NO. 878/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
.883	200.260	.32421	-.15703	-.61326	.04692	-.03072	.11490
.104	299.960	.49911	-.20305	-.42241	.00902	-.01273	.13991
-.027	399.960	.46045	-.16507	-.30623	.00306	-.00620	.14779
.088	599.900	.34580	-.12771	-.20879	.01109	-.00868	.12670
.311	799.960	.23673	-.07331	-.14814	.02572	-.01249	.13286
-.119	998.400	.24925	-.11407	-.14739	.04330	-.01296	.15733

RUN NO. 875/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.170	197.770	-.04089	.02321	-.41867	.03575	-.03350	.3546
200.670	299.020	.06854	.00957	-.43501	.04124	-.03427	.12835
202.160	399.670	.12268	.00351	-.41113	.03437	-.02458	.13054
199.850	600.160	.13893	.00731	-.33511	.03144	-.01880	.15448
202.460	801.330	.18660	-.03301	-.26914	.06069	-.02516	.16350
201.180	999.910	.26170	-.12063	-.23139	.07643	-.02389	.17098

RUN NO. 871/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.740	.070	-.10833	.02612	-.27859	.03295	-.02712	.19168
399.420	50.188	-.10248	.02792	-.29153	.02835	-.02789	.18168
399.220	100.160	-.10600	.02929	-.30558	.02549	-.02891	.19192
399.220	150.160	-.10487	.03027	-.32180	.01964	-.02776	.19067
398.690	199.050	-.12440	.04762	-.35661	.02480	-.02626	.18494
399.950	298.610	-.09811	.05234	-.41922	.03612	-.02734	.17500
400.730	400.130	-.03190	.04341	-.44260	.04790	-.02807	.16996
399.520	600.010	.08188	.01144	-.41253	.08197	-.03338	.17324
402.390	801.260	.18379	-.05398	-.36745	.11607	-.03706	.17872
401.360	1000.000	.26395	-.14351	-.29626	.11111	-.02890	.18504

RUN NO. 885/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.810	801.040	.15872	-.10353	-.41355	.20065	-.04813	.19077

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1A13 SOURCE DATA

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1A13.SR81581WITH PLUMES SEPARATING FROM 09T10

(RTJ249) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -10.000 DBETA = -5.000  
 X = .000 PCHMB = 1500.000

RUN NO. 916/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
.342	600.030	.41994	-.17899	-.19262	-.00019	.00317	.12058
1.416	801.590	.25760	-.08059	-.14091	.01914	-.00859	.12158
.008	1000.100	.24410	-.10555	-.13845	.04114	-.01274	.14842

RUN NO. 915/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
199.780	198.450	.09159	-.07700	-.49869	.10099	-.05124	.09794
202.050	299.370	.28567	-.17122	-.46031	.04741	-.03863	.11292
202.410	399.390	.31294	-.16682	-.39035	.02984	-.02651	.11528
200.270	600.110	.29956	-.13950	-.32117	.01893	-.01444	.12048
199.920	800.040	.22662	-.06641	-.26596	.04400	-.02124	.14018
200.880	1000.100	.25879	-.11141	-.23037	.07159	-.02380	.15689

RUN NO. 914/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.680	150.130	-.18333	.06769	-.41173	.11209	-.05869	.16871
397.970	198.900	-.14279	.05429	-.43499	.10434	-.05755	.16152
399.540	298.760	-.09049	.04167	-.46460	.08343	-.04668	.15082
402.640	399.610	-.02206	.02858	-.45567	.06480	-.03539	.15137
399.940	600.050	.08227	-.00205	-.39522	.06558	-.03009	.15307
401.060	799.980	.17294	-.04997	-.36009	.09854	-.03451	.16361
400.180	1000.200	.24974	-.12446	-.30705	.10907	-.02911	.17108

RUN NO. 888/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.940	799.950	.14295	-.09051	-.43030	.20918	-.05170	.19044

DATE 02 AUG 75

IA13 SOURCE DATA  
(RTJ250) ( 31 JUL 75 )

IA13,SR8(SB)WITH PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XRRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YRRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZRRP = 447.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 P10TL = 28.900  
ALPHA = .000 BETA = 5.000  
DALPHA = -10.000 DBETA = -10.000  
X = .000 PCHWB = 1500.000

RUN NO. 917/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
408	600.140	.40561	-.14321	-.16428	-.03378	.01491	.13931
-.672	798.690	.24622	-.06117	-.16218	.00674	-.00810	.13089
-1.450	998.450	.22062	-.07329	-.15918	.03981	-.01539	.15304

RUN NO. 930/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.700	400.280	.51478	-.32545	-.35782	-.01840	-.01204	.10478
200.500	599.960	.38344	-.20592	-.29548	.00819	-.01351	.10200
200.510	799.970	.27422	-.12576	-.25082	.03063	-.01611	.12637
200.930	1000.300	.24184	-.10605	-.26389	.07875	-.02452	.15340

RUN NO. 932/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
203.130	801.010	.63431	-.39235	-.37301	.10527	-.04347	-.02226
200.860	1000.700	.48418	-.28137	-.24091	.08829	-.02049	.05507

RUN NO. 931/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.280	298.200	.16306	-.16529	-.49742	.10283	-.06447	.12914
400.440	400.160	.25621	-.18456	-.47250	.06843	-.04810	.12073
400.440	600.020	.20128	-.09656	-.37002	.05528	-.02098	.12972
401.660	801.050	.18879	-.06672	-.34173	.09513	-.03182	.15097
401.050	1000.200	.24061	-.12251	-.32097	.12018	-.02912	.17003

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ251) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 918/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
.632	599.900	.25935	-.02644	-.13352	-.02056	.01231	.16294
.146	799.980	.17243	-.00043	-.14769	.03426	-.01215	.16589
.685	999.860	.23428	-.08252	-.14012	.04237	-.01400	.17618

RUN NO. 936/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.590	599.980	.39203	-.17215	-.20193	-.06651	.03377	.14525
200.530	799.950	.30611	-.10587	-.19300	.00586	.00051	.14588
200.790	1000.200	.23904	-.08742	-.20977	.06741	-.02086	.16079

RUN NO. 937/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.090	600.060	.35447	-.22659	-.32478	-.00196	-.01447	.04791
400.410	799.840	.31595	-.15936	-.27558	.02338	-.01407	.10762
400.890	999.820	.26327	-.12381	-.26897	.08205	-.02594	.14478

RUN NO. 896/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.440	400.180	.25621	-.18458	-.47250	.06843	-.04810	.12073

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ252) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 877/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN	CBL	CA
2.053	601.140	.54930	-.30856	-.33018	.09008	-.08879	.12080
1.055	801.370	.54419	-.32670	-.28438	.09040	-.06031	.10621
-.589	1000.500	.39172	-.23823	-.19000	.04955	-.01391	.10436

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -10.000 DBETA = -20.000  
 X = .000 PCMRB = 1500.000

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = 5.000  
 X = .000 PCMRB = 1500.000



IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ252) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = 5.000  
 X = .000 PCMRP = 1500.000

RUN NO. 878/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.440	600.330	.31788	-.13958	-.42447	.09662	-.08323	.13775
187.170	799.710	.25897	-.11014	-.32575	.08828	-.04942	.14281
198.280	999.500	.20784	-.08243	-.26244	.07978	-.02186	.15733

RUN NO. 879/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.210	800.250	.05829	.03467	-.40860	.07223	-.03253	.17537
402.150	801.270	.13708	-.01623	-.36987	.11061	-.03551	.18011
400.320	999.390	.22714	-.10643	-.32018	.11873	-.02777	.18095

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ253) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = 5.000  
 X = .000 PCMRP = 1500.000

RUN NO. 882/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
1.743	801.900	.62801	-.37921	-.25800	.08965	-.03707	.05582
.278	1000.400	.51393	-.32904	-.14699	.03874	-.01030	.06756

RUN NO. 880/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
199.830	600.290	.55373	-.33039	-.45215	.11240	-.11124	.12043
203.080	800.730	.41978	-.23150	-.34994	.10260	-.04324	.11021
199.690	1000.500	.30155	-.14855	-.23943	.07288	-.01759	.13368

RUN NO. 881/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.770	600.260	.18728	-.07035	-.46741	.10190	-.06672	.15398
399.930	800.270	.20514	-.07373	-.38346	.11206	-.05120	.15888
397.760	999.730	.23963	-.10751	-.30194	.10447	-.02832	.16715

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1A13 SOURCE DATA

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1A13,SR8(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ253) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 886/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.520	800.030	.14891	-.09507	-.41732	.17154	-.04609	.14780

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = .000  
 X = .000 PCHWB = 1500.000

1A13,SR8(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ254) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 919/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
1.745	801.380	.59728	-.34394	-.17388	.02011	-.00423	.02468
-.005	1000.400	.41954	-.23288	-.08840	-.00171	-.00019	.05539

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = -5.000  
 X = .000 PCHWB = 1500.000

RUN NO. 922/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.010	800.300	.64138	-.40807	-.43243	.08917	-.09025	.11949
203.000	801.240	.59002	-.36508	-.40615	.13350	-.05973	.05877
200.590	1000.500	.49194	-.30968	-.25934	.08253	-.02433	.08214

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = -5.000  
 X = .000 PCHWB = 1500.000

RUN NO. 923/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.380	598.550	.47489	-.31493	-.52518	.14144	-.12687	.13356
400.090	800.280	.38331	-.22882	-.43011	.13982	-.07972	.12079
397.700	999.920	.26221	-.13410	-.32002	.11081	-.03136	.13887

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = -5.000  
 X = .000 PCHWB = 1500.000

RUN NO. 887/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.410	799.970	.15028	-.08131	-.45209	.20363	-.05354	.18877

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = -5.000  
 X = .000 PCHWB = 1500.000

IA13.SRB(S)WITH PLUMES SEPARATING FROM 09T10

(RTJ255) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 P10TL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = -10.000  
 X = .000 PCMRB = 1500.000

RUN NO. 920/ 0 RN/L = 1.74

Y Z CN CLM CY CYN CBL CA  
 .448 800.240 .56699 -.31082 -.06924 -.05933 .04206 .07880  
 -.720 999.060 .44622 -.23748 -.04039 -.04500 .02791 .09474

RUN NO. 932/ 0 RN/L = 1.74

Y Z CN CLM CY CYN CBL CA  
 203.130 801.010 .63431 -.39235 -.37301 .10527 -.04347 -.02226  
 200.860 1000.700 .46416 -.26137 -.24091 .06829 -.02049 .05507

RUN NO. 933/ 0 RN/L = 1.74

Y Z CN CLM CY CYN CBL CA  
 401.510 798.110 .57796 -.37554 -.53723 .20349 -.08372 .08760  
 397.240 999.620 .43845 -.27320 -.36791 .14164 -.03655 .10037

RUN NO. 894/ 0 RN/L = 1.74

Y Z CN CLM CY CYN CBL CA  
 800.120 800.000 .20096 -.12763 -.45905 .20401 -.07142 .17576

## REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 P10TL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = -20.000  
 X = .000 PCMRB = 1500.000

IA13.SRB(S)WITH PLUMES SEPARATING FROM 09T10

(RTJ256) ( 31 JUL 75 )

RUN NO. 921/ 0 RN/L = 1.76

Y Z CN CLM CY CYN CBL CA  
 1.442 802.310 .43928 -.18338 -.06038 -.05294 .05233 .17710  
 -.521 999.080 .35079 -.17055 -.10948 .00414 .01509 .15116

RUN NO. 835/ 0 RN/L = 1.76

Y Z CN CLM CY CYN CBL CA  
 200.500 800.240 .42604 -.19158 -.07458 -.10337 .02890 .12075  
 200.050 999.990 .48082 -.26457 -.04640 -.05055 .03630 .14098

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IA13 SOURCE DATA

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(RTJ258) (31 JUL 75)

IA13 SRB(SB) WITH PLUMES SEPARATING FROM 09T10

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 934/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
403.800	802.440	.63699	-.37348	-.53505	.22042	-.03502	-.02305
398.170	1000.700	.49237	-.28501	-.27340	.10294	-.02407	.12553

RUN NO. 895/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.420	800.000	.58675	-.42069	-.62120	.32553	-.13479	.14253

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = -20.000  
 X = .000 PCFMB = 1500.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 945/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
10.254	.098	-.06128	.03467	-.16780	.03566	-.01761	.17677
10.093	50.153	-.06163	.03709	-.16879	.04091	-.01718	.17650
10.158	100.100	-.05868	.03449	-.18743	.04209	-.01779	.17715
10.982	150.150	-.05245	.03160	-.18930	.04395	-.01842	.17714
10.139	200.250	-.04599	.02818	-.18944	.04648	-.01929	.17832
9.885	299.950	-.04448	.02509	-.16415	.04827	-.01754	.17811
9.475	399.490	-.04994	.02783	-.15586	.04701	-.01621	.17728
10.338	599.630	-.05631	.02936	-.14703	.04252	-.01651	.17643
10.473	799.660	-.05907	.03133	-.14750	.04263	-.01656	.17747
9.805	999.880	-.05867	.03118	-.14715	.04253	-.01654	.17707

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = .000  
 X = .000 PCFMB = .000

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IA13 SR8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ258) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 944/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
.475	-.118	-.08371	.03589	-.15793	.03771	-.01738	.17806
.179	49.714	-.06213	.03597	-.16017	.03974	-.01771	.17852
.265	99.659	-.05882	.03477	-.16315	.04139	-.01795	.17863
.307	149.720	-.05514	.03247	-.16682	.04407	-.01854	.17959
1.187	200.290	-.04905	.02730	-.16684	.04571	-.01964	.18041
.559	300.560	-.04610	.02645	-.16337	.04827	-.01757	.17915
.140	400.430	-.05101	.02862	-.15598	.04719	-.01614	.17858
.076	599.980	-.05655	.02973	-.14658	.04247	-.01646	.17771
.226	799.900	-.05962	.03183	-.14695	.04252	-.01653	.17865
.371	998.440	-.05970	.03181	-.14678	.04247	-.01651	.17846

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = 5.000  
 X = .000 PCMB = .000

IA13 SR8(SB) WITH PLUMES SEPARATING FROM 09T10

(RTJ259) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 1041/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
.119	.009	-.06437	-.01901	-.05255	-.04209	.00814	.11286
.344	49.910	-.06515	.00071	-.12143	-.06560	.01727	.12356
-.957	97.941	-.03744	.02595	-.19938	-.08300	.02191	.14643
-.270	150.340	.03862	.03764	-.21414	-.09701	.02499	.16114
-.303	200.040	.12422	.04020	-.17870	-.08893	.02597	.15244
2.803	298.550	.19099	.04283	-.08477	-.07500	.02177	.15592
.057	400.180	.17410	.06283	-.01173	-.06585	.01875	.16511
-.146	500.140	.15585	.00722	.05682	-.03991	.01784	.15805

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = 5.000 DBETA = 5.000  
 X = .000 PCMB = 1500.000

DATE 02 AUG 75

1A13 SOURCE DATA

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09110

(RTJ259) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. X1  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 1042/ 0 PN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
203.350	.670	-.10445	.04277	-.09720	-.01343	-.00833	.17380
201.490	50.976	-.06161	.03025	-.15548	-.00475	-.01371	.16024
201.230	100.420	-.04315	.02181	-.16858	-.01564	-.01433	.15690
200.040	150.480	-.01742	.01492	-.16001	-.02817	-.00823	.14930
200.150	200.810	.01395	.01734	-.15882	-.03447	-.00386	.14989
198.760	300.270	.03726	.02915	-.12782	-.03779	.00272	.16901
199.640	400.490	.05649	.02965	-.12862	-.02893	.00265	.17682
200.340	599.830	.13119	-.02158	-.04445	-.00745	.00496	.17801

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .003 BETA = -5.000  
 DALPHA = 5.000 DBETA = 5.000  
 X = .000 PCHRG = 1500.000

RUN NO. 1043/ 0 PN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.160	.291	-.09698	.03838	-.03103	-.01281	.00043	.18798
400.720	49.904	-.12952	.05505	-.05282	-.00469	-.00117	.18302
400.330	89.522	-.12985	.05644	-.07029	.00337	-.00332	.18113
401.100	149.450	-.09886	.04327	-.08943	.01323	-.00638	.18121
400.110	198.950	-.05764	.02910	-.10574	.02191	-.00879	.18301
400.220	299.420	-.00651	.01713	-.12600	.02871	-.00867	.18566
402.360	399.150	.05030	-.00965	-.12654	.02803	-.00676	.18879
399.910	598.760	.14195	-.05458	-.07605	.03010	-.00269	.19548

A13,SR8(SB)WITH PLUMES SEPARATING FROM 0810

(RTJ260) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1052.0000 IN. VT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = 5.000 DBCTA = .000  
 X = .000 PCMB = 1500.000

RUN NO. 1046/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
-371	-033	-01031	-07247	-07438	-05048	01442	09939
839	50.095	00727	-06026	-16119	-07991	02320	11812
2481	101.650	04605	-02538	-23034	-09234	02458	13648
094	149.850	10961	01315	-25055	-09896	02484	15552
-112	199.710	16628	03755	-20485	-08990	02594	15810
159	299.660	20949	04889	-08874	-07154	02050	15564
-2123	401.120	19369	05926	00083	-06517	01867	16285
167	599.930	13619	01827	07418	-04222	01806	15711

RUN NO. 1045/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.860	-576	-08171	03670	-09941	-01536	-01161	16401
189.540	49.509	-03993	01258	-11388	-01382	-01417	14500
199.920	99.354	-01759	00345	-11602	-02278	-01071	13260
200.120	149.260	00458	00301	-11890	-02834	-00538	12441
201.690	198.680	02921	00434	-13237	-04062	-00006	13199
201.750	300.510	07778	01737	-10222	-05010	00441	14768
200.630	399.930	04747	02884	-09526	-03547	00720	16897
200.290	601.710	13892	-01457	-04619	-00852	00603	16968

RUN NO. 1044/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
403.310	-226	-16078	06669	-03691	-01164	00127	17632
400.230	50.040	-14923	06677	-05372	-00578	00000	17372
401.080	100.370	-11882	04946	-07043	00040	-00177	17114
400.760	150.620	-08240	03908	-08799	00715	-00405	17093
400.700	200.640	-04861	03068	-10611	01443	-00562	17131
400.730	300.790	00288	01719	-13245	02307	-00791	17596
400.550	400.680	05713	-00332	-12783	02034	-00751	18292
398.430	600.250	11584	-03934	-08237	02217	-00376	18968



DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,SR8(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ261) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2590.0000 50.FT. XMRP = 1052.0000 IN. XT  
LRZF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BRZF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = 5.000 DBETA = -5.000  
X = .000 PCFHB = 1500.000

RUN NO. 1091/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	COL	CA
.641	400.550	.93566	-.30447	-.00311	-.06081	.01642	.17307
.195	596.730	.59356	-.19247	.08224	-.04024	.01581	.16469

RUN NO. 1094/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.130	-1.008	.20201	-.14138	-.06263	-.02598	-.00656	.14537
199.360	50.901	.30998	-.20350	-.07312	-.02617	-.00771	.12165
199.690	97.537	.16241	-.12012	-.08565	-.03157	-.00457	.11576
200.100	148.320	.28617	-.15505	-.08760	-.04085	-.00450	.11533
200.570	196.710	.35803	-.16773	-.08474	-.05603	.00036	.12250
200.840	300.280	.57531	-.23327	-.09203	-.06501	.00838	.14693
200.840	399.040	.54046	-.22251	-.05716	-.04293	.00830	.15735
200.600	599.610	.45178	-.17671	-.03828	-.02043	.00728	.17073

RUN NO. 1095/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.170	2.250	.34779	-.19989	-.03242	-.01562	-.00089	.17936
400.750	48.372	.13283	-.08886	-.06400	-.00796	-.00479	.17007
400.520	100.240	.12025	-.07223	-.08922	-.00278	-.00638	.16520
400.550	150.720	.15559	-.07978	-.10564	.00359	-.00612	.16275
400.600	202.510	.43928	-.21562	-.12201	.00717	-.00525	.16578
400.460	300.550	.47292	-.22031	-.13303	.00606	-.00263	.17593
399.510	398.290	.24122	-.09432	-.12214	.00942	-.00191	.17733
398.070	601.340	.42251	-.19045	-.06667	.01462	-.00114	.18145



1A13.SRB(SB)WITH PLUMES SEPARATING FROM ORT10

(RTJ262) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 90.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = 5.000 DBETA = -10.000  
 X = .000 PCMRB = 1500.000

RUN NO. 1092/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
3.036	398.430	.75525	-.20198	-.00223	-.05892	.01620	.17782
1.375	599.970	.97033	-.36918	.06501	-.04466	.01830	.17547

RUN NO. 1115/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.490	201.230	.24223	-.11540	-.06359	-.08131	.01207	.12244
200.240	300.830	.57965	-.23230	-.08181	-.07813	.01198	.14735
200.450	399.430	.37004	-.11611	-.08368	-.04300	.00911	.15457
201.020	599.890	.19988	-.04138	-.02997	-.02448	.00550	.16875

RUN NO. 1114/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.140	.187	.04860	-.09335	-.00518	-.02631	.00220	.16418
399.450	49.640	.02393	-.08227	-.05089	-.01969	-.00111	.16247
400.410	99.041	.00312	-.05839	-.09167	-.01044	-.00932	.15934
400.170	148.520	-.01377	-.02828	-.11691	-.00080	-.00964	.14959
399.410	199.490	.05520	-.04149	-.12735	.00064	-.00780	.14048
401.190	296.480	.04189	-.01770	-.14819	-.00302	-.00272	.15344
400.180	401.500	.35429	-.15122	-.12824	.00075	-.00179	.16587
401.200	601.030	.48790	-.21891	-.06300	.01038	.00177	.17827

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 90.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = 5.000 DBETA = -20.000  
 X = .000 PCMRB = 1500.000

RUN NO. 1093/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
.883	397.100	.85117	-.22095	.04182	-.05729	.01560	.19907
.365	600.120	.83901	-.30257	.10791	-.03835	.01894	.18313

1A13.SRB(SB)WITH PLUMES SEPARATING FROM ORT10

(RTJ263) ( 31 JUL 75 )

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM ORT10 (RTJ263) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 1132/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CEB	CA
200.420	398.490	.10790	.05633	-.05002	-.07219	.01438	.18220
200.790	599.630	.08119	.05309	-.01737	-.02572	.03852	.17759

RUN NO. 1133/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CEB	CA
400.980	200.240	.14196	-.14983	-.02592	-.06580	.01222	.14144
401.480	300.430	.11637	-.06143	-.09097	-.03503	-.00193	.14069
403.120	398.940	-.05703	.04684	-.12403	-.01372	-.00351	.15520
401.550	597.460	.00433	.03286	-.08710	-.00477	-.00096	.17388

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = 5.000 DBETA = -20.000  
 X = .000 PCMMB = 1500.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 1047/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CEB	CA
-.170	-.067	-.08839	-.01388	-.06898	-.01622	.00032	.11135
.370	50.039	-.07497	-.00836	-.13309	-.04530	.00986	.11708
-1.601	98.074	-.03564	.00224	-.20042	-.07445	.01963	.13514
.228	147.390	.02567	.01989	-.22595	-.09195	.02278	.13259
.245	200.510	.12166	.02372	-.20219	-.09488	.02533	.15444
-.065	300.110	.21491	.02351	-.11052	-.07591	.02229	.14924
.275	400.140	.19329	.05725	-.03430	-.06763	.01807	.15640
.358	599.940	.17426	.01339	.04216	-.04035	.01710	.14774
.192	799.840	.21029	-.05416	.09295	-.04248	.01833	.16291
-.107	999.890	.24735	-.12195	.12329	-.04384	.01535	.18121

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = .000 DBETA = 5.000  
 X = .000 PCMMB = 1500.000

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(RTJ264) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = .000 DBETA = 5.000  
X = .000 PCMB = 1500.000

RUN NO. 1048/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.450	-0.13	-1.1289	.04381	-.07274	-.02485	-.00239	.17852
202.090	50.980	-.08291	.03145	-.14110	-.01215	-.01014	.15870
201.120	100.840	-.04504	.01962	-.14813	-.01729	-.01180	.15084
200.180	150.650	-.01441	.01184	-.14966	-.02372	-.00810	.14114
201.080	200.760	.01293	.01591	-.15776	-.03179	-.00325	.14087
199.620	301.130	.04315	.03102	-.13658	-.04495	.00513	.15625
198.930	400.580	.06397	.03385	-.11614	-.03862	.00463	.16435
200.900	599.890	.10931	-.00640	-.05010	-.01727	.00528	.16977
198.510	799.520	.20868	-.08477	.00585	-.00830	.00499	.18337
199.390	998.500	.23609	-.13596	.05135	-.00786	.00207	.17972

RUN NO. 1049/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.380	.025	-.14457	.05805	-.02061	-.02321	.00160	.20107
400.070	49.804	-.14404	.05641	-.04239	-.01557	-.00034	.19746
400.580	99.495	-.13126	.05217	-.06660	-.00628	-.00332	.19294
400.070	149.290	-.10165	.04429	-.09073	.00403	-.00660	.18678
400.170	198.750	-.06681	.03708	-.10915	.01243	-.00811	.18223
400.220	299.570	-.00059	.01887	-.13630	.02248	-.00766	.18115
401.890	399.180	.02762	.00724	-.13779	.02087	-.00530	.18196
402.020	600.220	.11622	-.03632	-.08060	.02476	-.00115	.18949
401.560	801.080	.20494	-.10632	-.02585	.02534	-.00288	.18739
399.470	999.030	.17769	-.11757	.04216	.00805	-.00286	.17729

RUN NO. 1071/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.000	800.350	.15451	-.08531	-.44195	.20138	-.05019	.19152

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ265) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 1052/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
-.701	.033	-.01809	-.08913	-.07867	-.03022	.00353	.08572
.783	50.034	.02050	-.09861	-.16579	-.06156	.01980	.10852
.257	100.120	.07302	-.07749	-.23358	-.08320	.02513	.12872
-.453	150.060	.15718	-.05631	-.25616	-.09794	.02566	.14228
.419	199.560	.21635	-.03254	-.21774	-.09963	.02580	.15256
.592	299.500	.28605	-.02592	-.09961	-.07999	.02215	.14420
.294	399.860	.22851	.03268	-.02157	-.06519	.01624	.15242
.379	599.810	.14765	.01456	.06479	-.04303	.01797	.14663
-1.611	799.590	.19529	-.04893	.09879	-.04269	.01593	.16609
.168	999.820	.25262	-.12606	.11771	-.04307	.01204	.18380

RUN NO. 1051/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
199.910	-.951	-.12304	.04084	-.08802	-.01678	-.00720	.16292
199.890	49.402	-.06465	.01701	-.11510	-.00743	-.01339	.14087
199.450	99.576	-.02299	-.00345	-.11203	-.01332	-.01149	.12631
200.100	149.290	.00687	-.00913	-.12127	-.02470	-.00557	.12215
201.950	199.570	.02689	-.00317	-.13247	-.03528	-.00016	.12099
200.760	300.420	.06784	.01892	-.10981	-.04723	.00446	.13185
200.390	399.980	.05730	.02561	-.10538	-.04372	.00898	.15514
202.710	600.590	.13039	-.00705	-.04097	-.01491	.00598	.18226
201.440	801.520	.21132	-.08016	.02011	-.00915	.00616	.17719
200.520	1000.700	.24695	-.14163	.06327	-.01413	.00350	.18031

RUN NO. 1050/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
401.900	.106	-.15622	.05921	-.01768	-.02106	.00297	.19126
400.080	50.030	-.15082	.05661	-.03977	-.01310	.00093	.18676
400.790	100.400	-.13378	.05237	-.06979	-.00317	-.00227	.17750
401.210	150.470	-.11266	.04830	-.09384	.00080	-.00450	.17410
400.320	200.550	-.08518	.04266	-.11565	.00528	-.00665	.17141
400.460	301.390	-.01920	.02875	-.14067	.01422	-.00953	.16943
400.000	400.670	.03210	.00992	-.13738	.01148	-.00645	.17865
399.320	500.620	.10571	-.02627	-.09004	.01796	-.00174	.18137
397.900	799.750	.20119	-.09777	-.02481	.02429	-.00344	.18598
399.180	998.580	.18820	-.12028	.05670	-.00082	-.00231	.17831

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = .000 DBETA = .000  
 X = .000 PCH#8 = 1500.000

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IA13 SOURCE DATA

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IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ265) ( 31 JUL 75 )

## REFERENCE DATA

SRF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LRF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = .000 DBETA = .000  
 X = .000 PCMH8 = 1500.000

RUN NO. 1078/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.110	801.360	.25759	-.15657	.07236	.00604	-.00088	.17773

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ266) ( 31 JUL 75 )

## REFERENCE DATA

SRF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LRF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = .000 DBETA = -5.000  
 X = .000 PCMH8 = 1500.000

RUN NO. 1098/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
.731	399.040	.41608	-.04980	-.01215	-.06531	.01637	.15625
.956	800.470	.34218	-.08187	.07302	-.03718	.01477	.15059
.858	801.470	.42841	-.16990	.11883	-.04098	.01662	.17329
.318	1000.100	.47241	-.24109	.14538	-.05008	.01592	.18407

RUN NO. 1096/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.500	-3.037	.03249	-.07799	-.10069	.00224	-.01676	.14268
200.250	51.071	.35923	-.25076	-.07064	-.01252	-.00904	.12065
199.520	99.052	.17472	-.14929	-.07573	-.02538	-.00120	.10985
199.770	149.550	.21952	-.16033	-.08975	-.03068	.00114	.10213
200.700	197.580	.18035	-.12054	-.09102	-.04617	.00356	.10536
202.560	299.560	.34929	-.14430	-.08118	-.05982	.00660	.11909
200.520	399.020	.46396	-.18978	-.07007	-.04543	.00888	.13998
200.910	599.000	.54588	-.21179	-.04839	-.02383	.00867	.15790
202.420	801.110	.42409	-.17645	.01950	-.00795	.00651	.16986
200.870	1001.000	.49463	-.25764	.08598	-.01982	.04606	.18204

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1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10 (RTJ266) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2600.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1200.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1200.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 1097/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.460	.970	.04129	-.04683	-.04683	-.00042	-.00526	.17478
400.820	48.578	-.03113	-.00535	-.07588	.00135	-.00632	.16900
400.500	100.310	-.03521	.00370	-.10051	.00593	-.00690	.16301
400.250	153.200	.32069	-.16988	-.11109	.00383	-.00416	.15987
400.320	201.310	.44031	-.22394	-.11725	.00028	-.00204	.15528
400.320	299.140	.24130	-.10595	-.12588	.00028	-.00090	.15559
400.180	403.630	.62998	-.29185	-.11356	.00135	-.00329	.16903
398.510	595.060	.07228	-.01514	-.07936	.00185	-.00208	.17424
397.840	802.390	.42099	-.20294	-.03120	.01495	-.00332	.18091
398.670	1000.100	.59095	-.31459	.04122	.00234	-.00117	.18278

RUN NO. 1079/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
801.540	797.590	.23135	-.14214	.04174	.02268	-.00007	.18169

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10 (RTJ267) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2700.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1200.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1200.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 1101/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
2.012	402.050	.63395	-.14423	.00210	-.06538	.01842	.17122
.888	596.880	.39045	-.06493	.06393	-.04241	.01490	.16584
.108	800.300	.48088	-.15744	.09804	-.04377	.01946	.17393
.528	1000.300	.40881	-.18251	.12020	-.04454	.01824	.18847

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .009 BETA = -5.000  
 DALPHA = .000 DBETA = -5.000  
 X = .000 PCMB = 1500.000

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = .000 DBETA = -10.000  
 X = .000 PCMB = 1500.000

IA13.SRB(SB)WITH PLUMES SEPARATING FROM OBT10

(RTJ267) ( 31 JUL 75 )

## REFERENCE DATA

SRE = 2890.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1200.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1200.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = .000 DBETA = -10.000  
 X = .000 PCMB = 1500.000

RUN NO. 1116/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
199.930	200.830	.30871	-.20763	-.03945	-.09068	.02527	.10299
200.770	303.470	.63002	-.30464	-.04084	-.09299	.01768	.11847
200.420	401.070	.42182	-.16101	-.06694	-.05398	.00989	.13744
200.870	599.970	.25950	-.07823	-.04105	-.02895	.00544	.15669
202.010	801.720	.32090	-.12795	.00186	-.01619	.00574	.17363
200.950	1001.500	.26973	-.13938	.03049	-.00271	-.00041	.18252

RUN NO. 1117/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.770	-.867	-.09802	-.00906	-.09277	.03333	-.02320	.15878
400.320	49.596	.01788	-.07588	-.11037	.02170	-.01746	.15907
399.880	99.151	.02342	-.07103	-.10480	.00224	-.00664	.14667
400.140	149.160	.14925	-.14210	-.11526	-.00231	-.00265	.13015
400.160	197.540	.20166	-.15730	-.12581	-.00687	-.00282	.12935
401.670	299.620	.36552	-.21148	-.12675	-.00813	-.00035	.13519
402.620	400.250	.27178	-.13606	-.09570	-.00907	.00216	.14186
402.210	597.610	.13430	-.04585	-.06884	.00807	.00160	.16032
401.720	801.870	.46835	-.22774	-.03321	.02025	-.00199	.17504
400.170	1002.500	.37078	-.20773	.02433	.00985	-.00125	.17920

RUN NO. 1086/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
801.270	798.690	.40031	-.23107	.04373	.02131	-.00169	.17997

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IA13 SOURCE DATA

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IA13.5881581 WITH PLUMES SEPARATING FROM 09T10

(RTJ268) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XNXP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YNXP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZNXP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 QALPHA = .000 DBETA = -20.000  
 X = .000 PCHEB = 1500.000

RUN NO. 1102/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
.529	398.180	.25313	.08598	.04213	-.06308	-.01646	.19666
.823	600.150	.24312	-.04619	.10288	-.03947	.01550	.18009
1.050	798.170	.13707	.00159	.13458	-.04148	.01566	.18461
-.033	998.710	.33334	-.15464	.15402	-.05269	.01809	.18619

RUN NO. 1131/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
199.960	400.260	.28071	-.03330	-.03309	-.08939	.01561	.16591
200.280	599.970	.21439	-.01593	-.02549	-.02962	.00955	.17246
200.010	799.570	.17200	-.02738	.04235	-.01653	.00798	.17866
200.290	1000.000	.23323	-.10971	.08960	-.02476	.00627	.18318

RUN NO. 1130/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
401.250	300.750	.29894	-.25746	-.03607	-.05751	.01627	.10043
400.430	399.650	.13463	-.11265	-.05708	-.06783	.01136	.11964
400.740	602.000	.24590	-.09188	-.08217	-.01181	.00111	.15202
401.980	801.100	.19530	-.05128	-.01745	.00287	.00289	.17050
400.710	1000.400	.17025	-.09312	.04584	-.00423	.00008	.18016

RUN NO. 1087/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.640	800.330	.26002	-.16185	.00312	.03232	-.00002	.16846

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(RTJ269) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PIOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -5.000 DBETA = 5.000  
 X = .000 PCHMB = 1500.000

RUN NO. 1053/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
.397	50.093	-.11940	.01204	-.14405	-.02532	.00621	.11579
-1.971	98.259	-.07375	.01288	-.22782	-.03816	.00741	.13002
.065	147.260	.00057	.02010	-.26668	-.06053	.01269	.14805
.547	200.520	.11359	.01293	-.24569	-.07861	.01738	.15996
.290	300.270	.23872	.00085	-.13438	-.06338	.01756	.15128
.480	400.290	.24550	.00883	-.04317	-.06175	.01587	.15171
-.134	600.020	.19805	.00751	.03882	-.03761	.01392	.13768
.095	799.910	.20500	-.04639	.09757	-.04174	.01867	.15170
.005	1000.200	.24587	-.11103	.13191	-.04677	.01668	.17141

RUN NO. 1054/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.990	50.314	-.11315	.04284	-.12658	-.01095	-.00854	.16782
200.690	100.900	-.06352	.02445	-.13921	-.01563	-.00964	.14917
201.110	150.510	-.03993	.01593	-.14635	-.02451	-.00581	.13927
201.510	201.090	-.00900	.01803	-.16117	-.03684	-.00012	.13866
199.520	301.670	.04808	.03422	-.14272	-.04576	.00511	.14810
198.420	400.830	.06669	.04035	-.10834	-.03893	.00495	.15316
200.040	599.970	.09740	.00233	-.05060	-.02479	.00696	.16462
197.980	799.870	.18727	-.06369	.00269	-.01280	.03602	.17114
198.610	998.770	.23498	-.12440	.04510	-.00817	.03246	.17948

RUN NO. 1057/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.720	.030	-.15442	.05783	-.00498	-.03325	.00359	.21212
400.140	49.781	-.15274	.05594	-.03385	-.02423	.00057	.20579
400.440	99.503	-.13493	.05093	-.06841	-.01271	-.00363	.19852
399.900	149.340	-.11136	.04773	-.09800	-.00224	-.00670	.19167
399.600	198.870	-.08314	.04379	-.11912	.00605	-.00732	.18360
400.200	299.240	-.02381	.03124	-.14267	.01200	-.00491	.17760
402.150	399.440	.02166	.01841	-.13599	.01306	-.03277	.18242
402.370	600.130	.09661	-.02236	-.08317	.01733	-.00067	.18338
402.060	800.910	.18185	-.08602	-.03638	.02304	-.00312	.18814
400.610	1000.000	.18427	-.11458	.03030	.00902	-.00172	.18064

RUN NO. 1072/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.640	799.970	.10275	-.07951	.05087	.01882	-.00166	.17847

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1A13 SOURCE DATA

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1A13.SRB(S)WITH PLUMES SEPARATING FROM 09T10

IRTJ270) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -5.000 DBETA = .000  
X = .000 PCMM6 = 1500.000

RUN NO. 1058/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
.906	50.122	-.05392	-.06394	-.19668	-.00574	-.00150	.08933
.526	100.010	.07463	-.12652	-.26508	-.05122	.00693	.11304
.268	150.040	.19868	-.12789	-.27928	-.08984	.02285	.13647
.208	199.900	.29633	-.11565	-.24390	-.09606	.02718	.15078
.362	299.760	.36223	-.08517	-.09158	-.09182	.02881	.14932
.614	399.860	.33150	-.05918	-.02165	-.06750	.01985	.14629
.175	599.780	.25341	-.05798	.05454	-.04510	.01444	.13145
-1.009	798.810	.19484	-.04500	.00922	-.04170	.01570	.14827
-.423	998.590	.24320	-.06866	.11034	-.04379	.01358	.17336

RUN NO. 1055/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.050	49.044	-.11650	.04049	-.15709	.03444	-.02805	.14338
198.850	99.446	-.06707	.02061	-.15297	.03319	-.02675	.12222
199.170	149.130	-.02117	-.00311	-.16301	.01231	-.01803	.12165
201.820	198.750	.02280	-.01162	-.18180	-.00299	-.01223	.12375
200.830	299.570	.09359	-.00808	-.13239	-.03583	.00028	.13397
200.120	400.190	.08018	.02107	-.12144	-.04408	.01005	.14633
201.830	600.270	.12287	-.00458	-.04278	-.02137	.00873	.15272
201.410	801.270	.19254	-.06264	.01771	-.01822	.00771	.16570
201.520	1000.300	.25123	-.13419	.04651	-.00980	.00375	.17621

RUN NO. 1060/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.040	-1.278	-.10821	.02962	.01687	-.03735	.00522	.20514
401.340	51.007	-.00558	-.02267	-.01751	-.02576	.00155	.19959
401.120	99.229	-.12595	.04521	-.06377	-.00980	-.00233	.19288
401.300	151.840	.05162	-.03766	-.10575	.00134	-.00614	.18857
401.200	199.590	-.05383	.02455	-.13704	.00567	-.00914	.17879
400.360	302.700	.14959	-.05605	-.15854	.01314	-.00818	.16945
400.140	399.620	.05196	-.00524	-.14578	.00337	-.00292	.17431
397.710	600.110	.01531	.02680	-.08113	.00843	.00106	.17479
397.960	802.220	.38970	-.18588	-.02358	.01749	.00071	.18456
398.970	996.770	.15806	-.10070	.03537	.00564	-.00087	.17792

RUN NO. 1077/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.160	798.160	.14814	-.10388	.03631	.02362	-.00282	.18190

IA13, SRB(SB) WITH PLUMES SEPARATING FROM ORBIT

(RTJ271) ( 31 JUL 75 )

## REFERENCE DATA

SRF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BRP = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 D-ALPHA = -5.000 DBETA = -5.000  
 X = .000 PC-#8 = 1500.000

RUN NO. 1098/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
- .633	399.320	.50207	-.14827	.01857	-.09004	.02601	.14897
.435	601.290	.54757	-.20732	.07722	-.04531	.01442	.13933
-.691	797.520	.33583	-.11609	.10850	-.03793	.01328	.15908
.400	1001.800	.48290	-.23764	.12951	-.04688	.01533	.17690

RUN NO. 1104/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
199.350	50.804	.22666	-.15772	-.14163	.05615	-.03128	.10436
199.930	89.797	.12450	-.11057	-.15673	.05069	-.02825	.09923
199.310	148.580	.18293	-.15278	-.15284	.01926	-.01879	.10183
200.350	201.100	.33685	-.22635	-.13982	-.01616	-.00251	.10903
202.600	301.430	.52546	-.27798	-.11534	-.04608	.00346	.11708
200.790	400.130	.41041	-.20760	-.08120	-.05014	.01267	.12452
200.540	599.390	.34606	-.13787	-.04466	-.02124	.00810	.13162
201.680	799.450	.41149	-.17383	.02857	-.01082	.00744	.15399
199.810	997.880	.17419	-.09361	.07859	-.01851	.00382	.16430

RUN NO. 1105/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.170	.330	.02500	-.03101	-.10164	.05100	-.02944	.18711
399.880	48.116	-.02122	-.00542	-.13320	.06840	-.03133	.18050
399.100	101.730	.20568	-.11860	-.13905	.05519	-.02304	.17060
399.650	147.170	-.00098	-.01397	-.13504	.03641	-.01427	.15831
398.030	197.820	.32086	-.17268	-.14165	.02295	-.00956	.15759
400.910	300.680	.51160	-.25202	-.14928	.00923	-.00621	.15625
401.120	400.660	.34219	-.15191	-.12979	.00271	-.00532	.15025
399.850	596.130	.24124	-.09771	-.09026	-.00358	-.00061	.16004
402.080	802.710	.37882	-.17522	-.02745	.01333	.00074	.16575
400.010	999.330	.20090	-.11799	.05160	-.00167	-.00023	.16600

RUN NO. 1080/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
799.860	801.890	.52935	-.29568	.05507	.01472	-.00252	.18436

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IA13 SOURCE DATA

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IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ272) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -5.000 DBETA = -10.000  
 X = .000 PCMRB = 1500.000

RUN NO. 1100/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
.591	400.050	.47278	-.10081	.05571	-.10649	.02922	.16157
1.533	602.280	.46904	-.12936	.08145	-.03900	.01258	.14780
.622	799.660	.55324	-.09945	.10793	-.03533	.01700	.16355
.589	998.080	.20177	-.06990	.14019	-.04462	.01756	.17354

RUN NO. 1119/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.420	299.220	.30899	-.20704	-.02946	-.10062	.03277	.11291
202.420	400.450	.48585	-.26935	-.04105	-.07438	.02472	.12925
270.460	599.820	.29261	-.14142	-.02542	-.04871	.01015	.13085
202.100	799.080	.09005	-.00512	-.00312	-.01715	.00606	.14813
201.160	1001.700	.33365	-.15321	.04105	-.01061	.00438	.16866

RUN NO. 1118/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.670	49.954	.01629	-.05114	-.17775	.08382	-.03530	.15558
399.710	100.530	.08511	-.10286	-.19519	.08244	-.03837	.14393
399.280	147.600	.05969	-.10011	-.19439	.06490	-.03239	.13072
400.330	200.810	.36677	-.25868	-.18502	.04134	-.02239	.13270
401.220	298.310	.13104	-.10446	-.12549	-.00908	.00026	.12783
402.080	399.280	.31648	-.19439	-.08773	-.01662	.00785	.12988
402.140	600.220	.24897	-.12640	-.06387	-.00284	.00238	.13266
402.050	801.500	.19723	-.09285	-.03600	-.00655	-.00048	.15749
401.240	1000.000	.07897	-.04708	.00336	.01212	-.00355	.16351

RUN NO. 085/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.680	799.070	.40841	-.22935	.01980	.03447	.00169	.17736

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1A13.SRB(S3)WITH PLUMES SEPARATING FROM 08T10

(RTJ273) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -5.000 DBETA = -20.000  
 X = .000 PCMB = 1500.000

RUN NO. 1103/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
-2.426	401.880	.47852	-.03850	.05358	-.07236	.02384	.20283
-1.847	600.950	.30835	-.01798	.10650	-.05054	.01605	.18352
.476	798.940	.06018	.05242	.11215	-.03951	.01568	.17943
-.751	1000.300	.28700	-.11948	.12173	-.04363	.01481	.18659

RUN NO. 1128/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.310	398.620	.25900	-.10417	.07506	-.15818	.05847	.15332
199.770	600.000	.20074	-.02175	-.01135	-.04179	.00817	.16293
199.720	798.510	.09988	.00427	.02955	-.01953	.00802	.17266
201.320	999.960	.25508	-.12222	.05650	-.01338	.00339	.18142

RUN NO. 1129/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.680	399.730	.29974	-.25502	-.04378	-.07375	.02805	.06874
400.970	600.570	.32347	-.19066	.00250	-.05377	.02008	.11255
401.160	800.290	.26994	-.12563	-.01407	.00166	.00241	.15430
397.880	997.450	.10602	-.06521	.03248	.00106	-.00023	.16369

RUN NO. 1088/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
799.450	802.480	.41278	-.23316	.02022	.02944	-.00029	.18640

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1A13 SOURCE DATA

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1A13.SR8(S) WITH PLUMES SEPARATING FROM 08T10

(RTJ274) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -10.000 DBETA = 5.000  
X = .000 PCW8 = 1500.000

RUN NO. 1061/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
.642	204.240	.37665	-.12578	-.32577	-.03178	-.00072	.15767
.346	300.250	.41896	-.09246	-.21228	-.02753	.00171	.16172
-.014	400.640	.42335	-.10128	-.08647	-.03305	.00757	.16046
2.022	600.980	.33048	-.09540	.02311	-.02717	.01175	.13252
1.173	801.080	.33082	-.11730	.09342	-.03607	.01704	.17139
.018	1000.900	.38316	-.17584	.13742	-.04953	.01804	.15812

RUN NO. 1062/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.610	201.240	.24098	-.11123	-.16838	-.02134	-.00452	.14388
199.550	300.030	.03193	.04816	-.17138	-.02755	-.00158	.14199
197.860	400.320	.03667	.05750	-.11657	-.03098	.00487	.14812
197.700	600.310	.14592	-.01023	-.05639	-.02670	.00956	.15800
198.100	799.370	.17977	-.05099	.00563	-.01827	.00741	.16086
198.380	1000.200	.38713	-.19062	.04830	-.01190	.00390	.17060

RUN NO. 1058/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.940	.714	-.16343	.05790	.01120	-.04226	.00491	.21951
400.440	50.340	-.15884	.05553	-.02584	-.03174	.00159	.21451
401.050	100.570	-.14260	.05212	-.06174	-.02277	-.00222	.20913
400.530	150.610	-.12575	.05103	-.09449	-.01415	-.00470	.20145
400.450	200.810	-.08490	.03827	-.11841	-.00540	-.00522	.19225
400.910	301.300	-.05876	.04474	-.14579	.00346	-.00364	.18065
399.570	401.670	.03705	.01335	-.13394	.00568	-.00241	.17967
398.430	600.540	.08072	-.00954	-.09004	.00529	-.00052	.18235
398.010	800.150	.18428	-.07844	-.03684	.01305	-.00007	.18202
398.510	999.200	.21818	-.12404	.01698	.00939	-.00168	.17581

RUN NO. 1073/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.680	801.830	.22411	-.13913	.03008	.02897	-.00038	.18317

1A13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ275) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -10.000 DBETA = .000  
 X = .000 PCMRB = 1500.000

RUN NO. 1064/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
.414	201.010	.37150	-.17364	-.39580	-.00193	-.01404	.12653
.0.3	300.390	.60222	-.25423	-.14450	-.07322	.01629	.15946
-.144	401.600	.45816	-.15915	-.01899	-.07421	.02337	.15396
.222	597.850	.31017	-.10528	.05499	-.05588	.02101	.12510
-1.655	800.580	.46690	-.19728	.08201	-.03858	.01465	.12088
-.270	996.960	.20907	-.07962	.10748	-.04447	.01641	.15272

RUN NO. 1063/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.110	196.980	.08696	-.04335	-.20737	.01686	-.01948	.13050
202.580	299.290	.32020	-.12193	-.20922	-.00164	-.01415	.13684
200.450	402.780	.44227	-.16679	-.11565	-.00976	-.00476	.14795
201.830	598.320	.31683	-.12216	-.05458	-.02290	.00799	.14372
201.830	803.040	.55292	-.24738	.00948	-.02611	.00851	.15369
201.210	999.810	.35238	-.17362	.03231	-.00940	.00396	.16732

RUN NO. 1059/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.640	1.086	.00105	-.02832	.01614	-.03475	.00177	.21363
399.420	48.652	-.11749	.03168	-.02051	-.02968	-.00111	.20679
399.770	101.570	.02730	-.03660	-.06335	-.02340	-.00453	.20417
399.920	147.170	-.17915	.07713	-.11176	-.00569	-.00771	.19133
399.370	199.740	.11598	-.05743	-.17727	.03655	-.01764	.18318
400.240	299.430	.06508	-.01493	-.17220	.01562	-.00597	.16318
400.410	399.060	.06530	.00350	-.15299	.00490	.00004	.17167
401.930	599.740	.10366	-.01337	-.07348	.00497	.00452	.16836
402.170	801.260	.23225	-.10041	-.02757	.01123	.00318	.17351
401.000	1000.200	.24587	-.13971	.01613	.01112	.00104	.17088

RUN NO. 1076/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
799.980	797.950	.26786	-.16194	.02197	.03084	-.00141	.18449

DATE 02 AUG 75

1A13 SOURCE DATA

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ278) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -10.000 DBETA = -5.000  
 X .000 PCW#8 = 1500.000

RUN NO. 1108/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
1.897	598.800	.42556	-.10729	.13310	-.08731	.03408	.12405
1.217	802.980	.62843	-.29752	.09840	-.03983	.01338	.12181
.765	1000.300	.35082	-.16405	.11443	-.04277	.01500	.15740

RUN NO. 1107/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.590	197.720	.14249	-.10488	-.23274	.05677	-.02675	.10026
200.330	302.110	.64521	-.34772	-.19812	-.00528	-.00725	.13377
200.400	401.940	.44177	-.25202	-.12938	-.01994	.00091	.13349
199.880	599.830	.30823	-.16926	-.03899	-.02123	.01477	.12827
201.720	800.790	.53194	-.25971	.02269	-.01400	.00793	.12113
200.060	1002.000	.53355	-.27110	.06050	-.01546	.00420	.15497

RUN NO. 1106/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
389.270	151.570	.30854	-.16487	-.19104	.09158	-.03929	.18117
399.080	198.040	.13818	-.08241	-.21016	.08578	-.03861	.16848
398.780	300.170	.32388	-.16809	-.23745	.08374	-.03850	.15080
401.370	396.550	.23304	-.10962	-.18372	.03288	-.01805	.13764
400.160	599.950	.52736	-.23333	-.08484	-.00125	.00218	.14910
402.160	804.410	.72099	-.34768	-.01082	.00393	.00375	.16116
400.180	1001.500	.34581	-.19100	.04476	-.00149	.00019	.15505

RUN NO. 1081/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.050	801.770	.51831	-.28482	.01208	.02811	-.00071	.18103



IA13.5RB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ277) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 FTOTL = 28.900  
ALPHA = .000 BETA = -9.000  
DALPHA = -10.000 DBETA = -10.000  
X = .000 PCWAB = 1500.000

RUN NO. 1109/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
1.237	600.520	.49139	-.20894	.14074	-.08524	.03373	.12947
.020	799.640	.46604	-.18044	.12804	-.03520	.01269	.14776
-.017	1002.700	.46587	-.21491	.14958	-.04691	.01516	.16782

RUN NO. 1120/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.750	401.790	.48563	-.32802	-.02989	-.08369	.02440	.11960
200.520	601.740	.48066	-.25508	-.00378	-.06508	.02427	.11215
202.440	801.110	.34411	-.15962	.03196	-.02020	.00796	.10666
200.820	1000.100	.30317	-.14571	.08569	-.02168	.00751	.14455

RUN NO. 1121/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.150	298.040	-.01567	-.06897	-.22384	.07407	-.03874	.13785
401.220	397.910	.23865	-.20365	-.16317	.02541	-.02147	.12972
402.500	599.090	.32624	-.21522	-.08654	-.01145	.00295	.11399
403.000	800.510	.20756	-.10411	-.02925	-.00657	.00234	.12214
400.670	998.110	.18492	-.09691	.03087	-.00258	.00080	.14609

RUN NO. 1084/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.030	799.490	.40595	-.22305	-.01280	.04333	-.00051	.17413

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IA13 SOURCE DATA

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IA13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ278) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 1126/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
200.700	600.740	.54902	-.29840	.10030	-.13304	.05833	.15200
202.180	801.740	.39570	-.13582	.03429	-.03190	.00826	.15090
201.260	1000.800	.30179	-.13613	.04428	-.01067	.00436	.17058

RUN NO. 1127/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
399.960	598.530	.47026	-.30004	.01856	-.07028	.01678	.03596
400.230	800.350	.29242	-.16682	.00241	-.01591	.00856	.10494
398.560	998.970	.23249	-.13608	.02457	.00289	.00011	.14324

RUN NO. 1089/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN	CBL	CA
401.220	397.810	.23865	-.20365	-.15317	.02541	-.02147	.12972

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -10.000 DBETA = -20.000  
 X = .000 PCHWB = 1500.000

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 1065/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
2.513	601.690	.53032	-.27533	-.05786	.02828	-.05392	.13355
.699	801.120	.46790	-.28457	.01593	.01600	-.02055	.10882
.045	1000.800	.51419	-.31592	.07761	-.01115	.00314	.08864

RUN NO. 1066/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CBL	CA
202.170	598.050	.25257	-.11640	-.12927	.02478	-.04830	.14753
197.580	800.820	.37428	-.18715	-.03486	.00977	-.02215	.13861
198.380	999.110	.28573	-.14621	.03530	-.00949	.00056	.13724

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -20.000 DBETA = 5.000  
 X = .000 PCHWB = 1500.000

IA13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ279) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 1067/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CA
402.070	598.140	-.01889	.05468	-.09938	.00682	-.00027
401.860	800.800	.31954	-.13521	-.04129	.00745	.00008
399.740	1000.600	.38784	-.19877	.01077	.00674	.00122

RUN NO. 1074/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CA
799.990	801.680	.28882	-.15557	-.00645	.04177	-.00022

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -20.000 DBETA = 5.000  
X = .000 PCMRB = 1500.000

CBL	CA
-.00027	.17824
.00008	.17825
.00122	.16822

CBL	CA
-.00022	.18795

IA13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ280) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 1070/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CA
.943	800.070	.59484	-.35178	.04182	-.00331	.07501
.277	1000.500	.60839	-.35569	.07045	-.00839	.05086

RUN NO. 1068/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CA
200.770	600.820	.40287	-.24142	-.13708	.03248	.13271
200.540	801.800	.44005	-.27613	-.06172	.03872	.11003
200.410	998.520	.24508	-.16890	.00231	.01377	.10272

RUN NO. 1069/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN	CA
400.070	601.310	.40088	-.19540	-.13987	.03180	.16392
398.510	798.820	.27924	-.14608	-.06216	.02113	.15282
398.280	1000.800	.40633	-.21257	.00682	.00867	.15247

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -20.000 DBETA = .000  
Y = .000 PCMRB = 1500.000

CBL	CA
-.00049	.07501
-.00340	.05086

CBL	CA
-.07030	.13271
-.03993	.11003
-.00503	.10272

CBL	CA
-.03387	.16392
-.02390	.15282
-.00248	.15247

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1A13 SOURCE DATA

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1A13.98(160) WITH PLUMES SEPARATING FROM 09T10

(RTJ280) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 1075/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN	CBL	CA
801.000	799.290	.16485	-.10015	-.01277	.04168	-.00023	.18732

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -20.000 DBETA = .000  
 X = .000 PCHMB = 1500.000

1A13.58(158) WITH PLUMES SEPARATING FROM 09T10

(RTJ281) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1052.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
 SCALE = .0100

RUN NO. 1110/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
.887	797.900	.21728	-.15122	.11580	-.05021	.01959	.02409
.515	1001.800	.51430	-.29500	.13156	-.05850	.02836	.05150

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -20.000 DBETA = .000  
 X = .000 PCHMB = 1500.000

RUN NO. 1112/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
201.950	600.290	.58599	-.39522	-.10511	.01672	-.05675	.11974
201.940	799.710	.43340	-.29432	-.07830	.04152	-.03259	.07008
200.930	1002.400	.58928	-.39179	-.04085	.04054	-.01928	.05217

RUN NO. 1113/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
400.380	598.900	.46511	-.32715	-.18976	.07217	-.09541	.13602
398.190	799.400	.26010	-.20190	-.09440	.04755	-.04553	.11682
398.240	1000.800	.26713	-.17968	-.00663	.01914	-.01227	.11676

RUN NO. 1082/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN	CBL	CA
800.330	799.150	.38715	-.21368	-.00633	.04043	.00009	.18348

(RTJ282) ( 31 JUL 75 )

1A13,SR8(SB)WITH PLUMES SEPARATING FROM 09T10

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -20.000 DBETA = -10.000  
X = .000 PCMPB = 1500.000

RUN NO. 1111/ 0 RN/L = 1.76

Y Z CN CLM  
-.746 800.050 .38189 -.25179  
-.276 1001.900 .61269 -.36024

RUN NO. 1122/ 0 RN/L = 1.76

Y Z CN CLM  
201.780 799.500 .50082 -.35804  
201.120 1001.700 .54154 -.33939

RUN NO. 1123/ 0 RN/L = 1.76

Y Z CN CLM  
401.140 799.800 .57688 -.39520  
397.720 999.740 .60363 -.41000

RUN NO. 1083/ 0 RN/L = 1.76

Y Z CN CLM  
799.900 799.830 .45929 -.26746

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZPRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -20.000 DBETA = -20.000  
X = .000 PCMPB = 1500.000

RUN NO. 1125/ 0 RN/L = 1.77

Y Z CN CLM  
200.790 801.260 .61817 -.31748  
200.440 1003.900 .64987 -.37176

RUN NO. 1124/ 0 RN/L = 1.77

Y Z CN CLM  
400.620 797.900 .50276 -.33877  
400.560 997.820 .27685 -.21872

1A13,SR8(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ283) ( 31 JUL 75 )

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -20.000 DBETA = -20.000  
X = .000 PCMPB = 1500.000

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -20.000 DBETA = -20.000  
X = .000 PCMPB = 1500.000

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -20.000 DBETA = -20.000  
X = .000 PCMPB = 1500.000

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -20.000 DBETA = -20.000  
X = .000 PCMPB = 1500.000

DATE 02 AUG 75 1A13 SOURCE DATA

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 08T10

(RTJ283) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

RUN NO. 1090/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN	CSL	CA
799.960	001.750	.45401	-.36591	-.17790	.15480	-.07872	.12365

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -20.000 DBETA = -20.000  
X = .000 PCMR = 1500.000

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 08T10

(RTJ300) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 303/ 0 RN/L = .71

X	Z	CN	CLM	CY	CYN
.245	-.085	-.07268	-.02395	.07187	.01095
.205	49.901	-.06739	-.02431	.07677	.00958
.234	100.040	-.05754	-.01525	.06134	.00313
.115	150.390	-.05321	-.01078	.04805	-.00301
.136	200.410	-.05207	-.00951	.04979	-.00231
.159	300.100	-.05817	-.00988	.05296	-.00003
.078	400.080	-.06420	-.01919	.05969	.00562
.260	601.090	-.07219	-.03184	.06366	.01176
.128	801.060	-.07546	-.03142	.06811	.01185
-.754	1000.100	-.07446	-.03026	.06891	.01025

PARAMETRIC DATA

MACH = 4.480 PTOTL = 11.600  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = .000 PCMR = 1500.000

RUN NO. 304/ 0 RN/L = .71

X	Z	CN	CLM	CY	CYN
300.230	.178	-.08411	-.01546	.07492	.02220
300.510	48.373	-.06132	-.01867	.07478	.01424
300.290	99.754	-.05311	-.01466	.06653	.00358
300.330	151.540	-.05046	-.00915	.04818	-.00423
300.280	201.880	-.04759	-.00833	.04825	-.00431
300.380	298.870	-.04992	-.00869	.05176	-.00382
300.330	400.270	-.06038	-.01824	.05723	.00483
300.330	599.870	-.09762	-.04631	.07650	.01884
300.420	798.220	-.07320	-.03049	.06622	.01324
300.520	999.020	-.07277	-.03027	.06653	.01171

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ300) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SO.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 305/ 0 RN/L = .71

## PARAMETRIC DATA

MACH = 4.480 PTOTAL = 11.600  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = .000 PCMBR = 1500.000

X	Z	CM	CLM	CY	CYN
600.430	.681	-.00844	-.02822	.09912	.01314
600.480	51.034	-.02293	-.02894	.08204	.01645
600.520	99.583	-.05869	-.01444	.06073	.00791
600.480	149.210	-.04993	-.00926	.04810	-.00249
600.400	199.000	-.04742	-.00860	.04893	-.00392
600.530	299.820	-.05042	-.00967	.05283	-.00350
600.520	398.950	-.05665	-.01477	.05589	.00268
600.470	601.370	-.10119	-.05110	.07754	.01917
800.470	800.720	-.07499	-.03115	.08358	.01081
600.680	998.800	-.07199	-.03076	.06427	.01235

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ301) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SO.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 305/ 0 RN/L = .66

## PARAMETRIC DATA

MACH = 4.480 PTOTAL = 10.800  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = .000 PCMBR = 1500.000

X	Z	CM	CLM	CY	CYN
599.510	-.208	-.09192	-.01912	-.02821	-.01040
600.490	50.455	-.09453	-.02142	-.02610	-.01042
600.580	100.610	-.09812	-.03552	-.01670	-.01006
600.520	150.520	-.09598	-.02955	-.00801	-.00743
600.630	200.240	-.10158	-.03013	-.01414	-.00971
600.540	300.440	-.09607	-.03304	-.00765	-.00625
600.610	400.560	-.09328	-.03499	-.00051	-.00258
600.570	599.610	-.07708	-.02673	-.00806	.00734
600.700	799.060	-.07690	-.02434	-.00864	.00387
600.710	999.000	-.07308	-.02124	-.00152	.00088

DATE 02 AUG 75

1A13 SOURCE DATA

1A13, SRB(SB) WITH PLUMES SEPARATING FROM OST10

(RTJ302) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 307/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
.257	.275	-.01587	-.00721	.00891	.00453
.163	49.902	-.01697	-.00684	.01024	.00231
.158	98.555	-.01678	-.00379	.00825	.00169
.094	148.000	-.01468	-.00220	.00932	.00282
.271	199.880	-.01873	-.00529	.01483	.00616
.278	293.610	-.03740	-.01937	.02854	.01377
.226	400.010	-.03720	-.01826	.02576	.01002
.245	601.070	-.03095	-.01115	.02.22	.00552
.158	801.150	-.02866	-.00992	.02275	.00414
-.005	999.890	-.02865	-.00632	.02102	.00293

MACH = 4.510 PTOTAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y .000 PCMRB = 750.000

PARAMETRIC DATA

RUN NO. 308/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
300.320	1.227	-.01680	-.00353	.00703	.00171
300.310	48.765	-.01962	-.00457	.00733	.00041
300.380	99.649	-.01786	-.00381	.00717	-.00246
300.320	150.940	-.01398	-.00157	.00690	-.00130
300.380	200.980	-.01281	-.00083	.00742	-.00137
300.350	301.530	-.01906	-.00592	.01428	.00345
300.400	402.110	-.03927	-.02363	.02923	.01239
300.440	599.900	-.02957	-.01049	.02304	.00292
300.500	798.780	-.02721	-.01076	.02082	.00496
300.510	999.170	-.02972	-.00686	.02140	.00326

RUN NO. 309/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
600.490	-.046	-.02143	-.00360	.01004	.00396
600.530	51.214	-.02570	-.00520	.01131	.00616
600.530	100.110	-.01904	-.00287	.00694	-.00048
600.510	149.580	-.01642	-.00015	.00556	-.00121
600.470	199.080	-.01448	-.00039	.00856	-.00368
600.530	298.590	-.01489	-.00028	.01203	-.00213
600.420	400.210	-.02779	-.01320	.02227	.00628
600.530	601.130	-.03100	-.01456	.02457	.00396
600.510	800.380	-.02643	-.01113	.02148	.00390
600.560	999.830	-.02780	-.00959	.02176	.00432



IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ302) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 310/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
900.670	-.226	-.01971	-.00420	.01042	.00117
900.560	50.781	-.00530	-.00530	.01085	.00032
900.630	98.708	-.02648	-.00281	.00589	-.00424
900.640	143.800	-.01569	-.00169	.00572	-.00160
900.600	200.200	-.01904	-.00066	.00724	-.00321
900.640	300.170	-.01774	-.00075	.01237	-.00280
900.650	400.810	-.02210	-.00791	.01845	.00343
900.570	600.230	-.03298	-.01922	.02396	.00727
900.580	798.810	-.02346	-.01134	.02068	.00229
900.810	999.950	-.02666	-.01050	.02087	.00473

## PARAMETRIC DATA

MACH = 4.510 PTOAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = .000 PCHMR = 750.000

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ303) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 314/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
.202	-.572	-.03216	-.00575	.02680	.01467
.141	50.466	-.03497	-.00381	.02781	.01481
.114	100.520	-.03499	-.00571	.02567	.01420
.242	150.350	-.03386	-.00568	.02586	.01267
.236	200.400	-.03080	-.00696	.02455	.01084
.258	299.830	-.02712	-.00957	.02201	.00853
.267	400.970	-.02631	-.01130	.02347	.00590
.174	599.890	-.02889	-.00948	.02370	.00407
.244	799.020	-.02780	-.00827	.02251	.00328
.227	999.110	-.02447	-.00810	.02041	.00321

## PARAMETRIC DATA

MACH = 4.510 PTOAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 200.000 PCHMR = 750.000

DATE 02 AUG 75

1A13 SOURCE DATA

1A13,SR8(SB)WITH PLUMES SEPARATING FROM ORBIT

(RTJ3U3) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT  
LREF = 1290.3000 INCHES  
BREF = 1290.3000 INCHES  
SCALE = .0100

XMRP = 1167.0000 IN. XS  
YMRP = .0000 IN. YS  
ZMRP = 400.0000 IN. ZS

RUN NO. 313/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
300.260	-715	-.03111	-.00734	.03333	.01869
300.290	48.772	-.03233	-.01028	.03182	.02191
300.340	99.494	-.03427	-.01222	.03581	.02163
300.280	149.800	-.03532	-.01200	.04029	.02419
300.300	200.580	-.03487	-.01352	.03979	.02199
300.380	299.730	-.03661	-.01028	.02094	.01481
300.260	399.890	-.02943	-.00902	.02052	.00812
300.340	600.790	-.02711	-.01069	.02373	.00448
300.410	800.690	-.02706	-.01039	.02271	.00457
300.330	999.930	-.02761	-.00661	.02173	.00274

RUN NO. 312/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
600.530	.015	-.02586	-.00969	.02870	.00848
600.440	50.259	-.02792	-.00982	.02664	.00981
600.550	100.430	-.03013	-.01118	.02607	.01258
600.540	150.540	-.03021	-.01248	.02700	.01203
600.560	200.370	-.03088	-.01322	.02763	.01387
600.460	300.360	-.03941	-.01391	.02931	.01896
600.530	399.930	-.03873	-.01474	.02673	.01524
600.560	598.570	-.02760	-.00913	.02205	.00429
600.640	799.760	-.02598	-.01120	.02141	.00489
600.570	999.610	-.02787	-.00844	.02221	.00355

RUN NO. 311/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
900.810	-.320	-.03018	-.00940	.02358	.00803
900.550	49.583	-.02904	-.01121	.02268	.00868
900.560	99.759	-.03050	-.01439	.02461	.00889
900.590	150.220	-.03502	-.01603	.02581	.00957
900.550	200.150	-.03269	-.01508	.02515	.00972
900.650	299.950	-.03373	-.01135	.02042	.01159
900.630	400.420	-.03323	-.01223	.02027	.01290
900.620	600.340	-.02918	-.01163	.02163	.00876
900.610	799.890	-.02539	-.01082	.02141	.00400
900.720	999.910	-.02721	-.01004	.02194	.00424

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 200.000 PCMR = 750.000

DATE 02 AUG 75 1A13 SOURCE DATA

1A13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ304) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2600.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCMRP = 750.000

RUN NO. 315/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
.280	-.069	-.02737	-.00550	.03109	.00023
.224	49.902	-.02756	-.00547	.02927	.00086
.215	99.825	-.02649	-.00628	.02777	.00157
.197	149.860	-.02523	-.00744	.02597	.00245
.203	199.520	-.02497	-.00820	.02502	.00303
.189	299.460	-.02472	-.00962	.02435	.00360
.237	399.490	-.02509	-.01012	.02404	.00395
.208	600.480	-.02692	-.00860	.02314	.00314
.293	800.280	-.02625	-.00752	.02276	.00208
.370	999.680	-.02381	-.00871	.01991	.00326

RUN NO. 316/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
300.300	.334	-.02682	-.00397	.03044	.00354
300.320	50.075	-.02948	-.00410	.03090	.00345
300.330	100.010	-.02934	-.00399	.02970	.00346
300.330	150.110	-.02980	-.00402	.02865	.00333
300.390	200.110	-.02909	-.00477	.02698	.00344
300.380	300.250	-.02672	-.00709	.02325	.00429
300.310	400.200	-.02492	-.00928	.02237	.00488
300.340	600.180	-.02577	-.01035	.02178	.00484
300.340	799.550	-.02731	-.00804	.02284	.00254
300.410	999.790	-.02407	-.00825	.02068	.00298

RUN NO. 317/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
600.470	-.120	-.02811	-.00444	.04069	.00674
600.420	49.794	-.02940	-.00540	.03969	.00665
600.490	99.834	-.03026	-.00641	.03841	.00621
600.400	149.910	-.03219	-.00599	.03442	.00507
600.430	200.000	-.03269	-.00528	.03288	.00480
600.540	299.990	-.03253	-.00407	.02753	.00475
600.480	399.820	-.02980	-.00533	.02276	.00500
600.590	599.820	-.02489	-.01064	.02034	.00549
600.520	800.120	-.02658	-.00988	.02121	.00440
600.490	999.930	-.02670	-.00724	.02126	.00281

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13.SRB(8)WITH PLUMES SEPARATING FROM 09T10

(RTJ304) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 318/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
900.500	.154	-.02462	-.00804	.03022	.01295
900.640	50.187	-.02461	-.01080	.02901	.01377
900.880	100.320	-.02488	-.01425	.02780	.01381
900.990	150.300	-.02959	-.01606	.02721	.01434
900.560	199.970	-.03274	-.01578	.03042	.01452
900.500	299.560	-.03357	-.01105	.02905	.01376
900.620	399.610	-.03403	-.00601	.02134	.00749
900.600	600.160	-.02555	-.00947	.01885	.00605
900.670	799.960	-.02537	-.01056	.02067	.00513
900.700	999.860	-.02759	-.00810	.02092	.00379

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCHEER = 750.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 319/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
-.018	799.820	-.02332	-.00887	.01899	.00292

RUN NO. 320/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
300.290	800.020	-.02345	-.00872	.01918	.00288

RUN NO. 321/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
800.500	799.970	-.02396	-.00872	.01900	.00189

RUN NO. 322/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
900.580	799.940	-.02442	-.00817	.02162	.00158

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 800.000 PCHEER = 750.000

IA13.SRB(8)WITH PLUMES SEPARATING FROM 09T10

(RTJ305) ( 31 JUL 75 )

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ306) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = .000 PCMRP = 1500.000

RUN NO. 323/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
.323	-.007	-.02454	-.01269	.01767	.00351
.369	49.859	-.02768	-.01132	.01704	.00294
.259	100.070	-.02027	-.00767	.01606	.00153
.211	150.230	-.01715	-.00354	.01405	.00006
.207	200.610	-.01536	-.00305	.01673	-.00118
.214	300.110	-.02794	-.01163	.02269	.00624
.084	400.020	-.04639	-.02942	.03607	.01529
.200	599.900	-.03343	-.01933	.02883	.00825
.164	799.970	-.03259	-.01648	.02690	.00681
-.670	1000.100	-.03013	-.01542	.02703	.00637

RUN NO. 324/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
300.180	.179	-.02441	-.00435	.02274	.00822
300.280	47.807	-.02529	-.00647	.01939	.00548
300.400	98.986	-.01745	-.00656	.01595	.00069
300.300	151.900	-.01395	-.00372	.01312	-.00188
300.310	202.030	-.01468	-.00290	.01397	-.00304
300.400	299.810	-.02015	-.00439	.01797	.00075
300.210	401.650	-.03726	-.02225	.03057	.01116
300.550	599.930	-.03340	-.01992	.02801	.00694
300.480	799.990	-.03419	-.01698	.02830	.00754
300.510	999.750	-.03264	-.01657	.02919	.00705

RUN NO. 325/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
600.640	-.5.2	-.02341	-.00764	.02059	.00722
600.510	51.615	-.03041	-.00998	.02536	.00847
600.460	99.917	-.02013	-.00476	.01665	.00450
600.410	149.260	-.02173	.00056	.01096	-.00027
600.550	198.690	-.01906	-.00197	.01312	-.00237
600.540	299.230	-.01481	-.00434	.02137	-.00208
600.450	399.120	-.02287	-.01295	.02434	.00496
600.380	600.150	-.03700	-.02404	.03149	.00666
600.570	800.740	-.03346	-.01717	.02771	.00702
600.530	999.090	-.03288	-.01663	.02797	.00748

DATE 02 AUG 75 1A13 SOURCE DATA

1A13.SRB(S)WITH PLUMES SEPARATING FROM 09T10

(RTJ308) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 326/ 0 RN/L = 1.75

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = .000 PCHMR = 1500.000

X	Z	CN	CLM	CY	CYN
900.700	.007	-.01824	-.00814	.02718	.00320
900.670	49.910	-.01677	-.00943	.02382	.00320
900.580	100.300	-.03102	-.00917	.01698	.00210
900.530	149.550	-.01904	-.00351	.01410	-.00217
900.590	199.620	-.01998	-.00254	.01481	-.00278
900.610	300.300	-.01928	-.00230	.01948	-.00289
900.600	400.340	-.02082	-.00746	.02241	.00162
900.590	602.500	-.05226	-.03483	.03950	.01162
900.730	799.940	-.03165	-.01796	.02574	.00652
900.720	999.640	-.03275	-.01687	.02746	.00746

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 327/ 0 RN/L = 1.76

1A13.SRB(S)WITH PLUMES SEPARATING FROM 09T10

(RTJ307) ( 31 JUL 75 )

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = .000 PCHMR = 1500.000

X	Z	CN	CLM	CY	CYN
.239	-1.155	-.04353	-.01135	.03875	.01970
.301	50.344	-.04233	-.01231	.03656	.01946
.211	101.010	-.04242	-.01201	.03792	.01778
.079	150.780	-.03999	-.01565	.03851	.01684
.121	200.810	-.03624	-.01730	.03541	.01600
.175	301.570	-.03429	-.01630	.03208	.01414
.188	400.940	-.03446	-.01799	.03023	.01072
.338	599.900	-.03520	-.01761	.03075	.00806
.235	799.920	-.03452	-.01686	.03046	.00667
.262	999.930	-.03162	-.01554	.02833	.00605

(RTJ307) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

## PARAMETRIC DATA

KACH = 4.510 PTOTAL = 29.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 200.000 PCHEER = 1500.000

RUN NO. 329/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
300.330	-.945	-.04038	-.01442	.03565	.02341
300.380	49.150	-.04163	-.01669	.04109	.02562
300.290	99.674	-.04149	-.01777	.04498	.02653
300.320	149.590	-.04041	-.02046	.04796	.02619
300.390	199.700	-.04021	-.02215	.04728	.02450
300.250	299.960	-.04134	-.02535	.04478	.02600
300.300	400.060	-.03447	-.01891	.02876	.01313
300.340	600.500	-.03496	-.01763	.03158	.00739
300.430	801.330	-.03427	-.01765	.03015	.00727
300.330	1000.500	-.03323	-.01686	.02876	.00684

RUN NO. 328/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
600.450	.030	-.03647	-.01467	.03662	.01365
600.500	50.261	-.03114	-.01330	.02392	.01022
600.540	100.310	-.02761	-.01333	.02250	.00898
600.590	150.180	-.02563	-.01321	.02490	.01061
600.570	200.720	-.03172	-.01875	.03696	.01716
600.520	301.270	-.04147	-.02563	.04352	.02056
600.430	400.860	-.04923	-.03010	.04625	.02517
600.820	599.860	-.03177	-.01651	.03095	.00747
600.470	799.240	-.03401	-.01752	.02942	.00712
600.690	999.220	-.03330	-.01710	.02873	.00709

RUN NO. 327/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
900.580	.507	-.04010	-.01807	.03451	.01438
900.640	49.921	-.02548	-.01116	.01380	-.00027
900.630	99.762	-.02419	-.01022	.01270	-.00181
900.630	149.830	-.02319	-.00870	.01140	-.00182
900.640	199.000	-.02316	-.00845	.01247	.00015
900.710	298.940	-.02392	-.01699	.03135	.01151
900.530	399.790	-.04405	-.02651	.04521	.01873
900.620	600.450	-.02909	-.02095	.02643	.01046
900.630	800.160	-.03162	-.01710	.02817	.00710
900.590	999.740	-.03276	-.01682	.02839	.00714

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM ORBIT

(RTJ308) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 400.000 PCMBR = 1500.000

RUN NO. 331/ 0 RN/L = 1.77

X	Z	CN	CLM	CY	CYN
.187	-.191	-.03336	-.01172	.03648	.00446
.244	49.624	-.03398	-.01166	.03530	.00492
.219	99.508	-.03458	-.01168	.03389	.00554
.233	149.520	-.03457	-.01177	.03245	.00609
.201	198.640	-.03297	-.01263	.03022	.00703
.211	298.920	-.03263	-.01451	.03032	.00660
.240	399.930	-.03369	-.01569	.03250	.00552
.208	599.920	-.03438	-.01574	.02998	.00624
.414	801.190	-.03277	-.01623	.02879	.00609
.319	999.000	-.02891	-.01628	.02620	.00598

RUN NO. 332/ 0 RN/L = 1.77

X	Z	CN	CLM	CY	CYN
300.400	1.258	-.03510	-.01186	.03976	.00706
300.390	49.962	-.03486	-.01166	.03825	.00768
300.200	100.060	-.03507	-.01090	.03740	.00762
300.400	150.220	-.03392	-.01079	.03630	.00769
300.410	200.350	-.03202	-.01164	.03488	.00786
300.330	300.910	-.03071	-.01371	.03229	.00805
300.470	400.650	-.03319	-.01484	.03059	.00767
300.380	600.690	-.03435	-.01683	.03090	.00668
300.490	799.360	-.03359	-.01677	.02929	.00638
300.550	999.030	-.03231	-.01562	.02771	.00587

RUN NO. 333/ 0 RN/L = 1.77

X	Z	CN	CLM	CY	CYN
800.500	-.109	-.03951	-.01383	.04091	.01145
600.390	49.718	-.03676	-.01402	.03915	.01201
600.420	99.823	-.03768	-.01482	.03691	.01242
600.310	149.850	-.03981	-.01451	.03568	.01224
600.410	199.800	-.03859	-.01378	.03402	.01183
600.440	299.840	-.03728	-.01170	.03402	.00931
600.480	399.850	-.03549	-.01271	.03328	.00839
600.610	600.690	-.03499	-.01654	.03062	.00679
600.500	799.910	-.03350	-.01682	.02885	.00666
600.470	999.870	-.03382	-.01682	.02792	.00582



IA13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ308) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 334/ 0 RN/L = 1.77

X	Z	CN	CLM	CY	CYN
900.490	.331	-.03714	-.01822	.03872	.01824
900.720	50.213	-.03928	-.01681	.03891	.01826
900.610	100.270	-.03867	-.01816	.03936	.01895
900.640	150.200	-.04103	-.01952	.03898	.01941
900.720	200.160	-.04271	-.02106	.03855	.01917
900.760	299.810	-.04404	-.02059	.03711	.01722
900.700	399.610	-.04034	-.01629	.03118	.01020
900.750	599.560	-.03167	-.01617	.02919	.00767
900.630	800.060	-.03254	-.01689	.02891	.00670
900.730	999.760	-.03361	-.01697	.02808	.00703

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
 ALPHA = .000 BETA = .003  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCHMR = 1500.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 335/ 0 RN/L = 1.78

X	Z	CN	CLM	CY	CYN
-.671	799.770	-.03055	-.01687	.02635	.00580

RUN NO. 336/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
300.490	799.700	-.03180	-.01650	.02642	.00567

RUN NO. 337/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
600.550	800.110	-.03282	-.01622	.02675	.00506

RUN NO. 338/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
900.530	799.870	-.03410	-.01577	.02807	.00520

IA13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ309) ( 31 JUL 75 )

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 29.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 800.000 PCHMR = 1500.000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13.SRB(SB)WITH PLUMES SEPARATING FROM G9T10

(RTJ310) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BRP = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = .000 PCMPBR = 1500.000

RUN NO. 339/ 0 RN/L = 3.49

X	Z	CN	CLM	CY	CYN
.184	.084	-.01677	-.00786	.00810	.00361
.263	50.012	-.01667	-.00716	.00681	.00172
.372	100.070	-.01424	-.00387	.00507	.00170
.403	150.240	-.01320	-.00352	.00756	.00288
.355	201.220	-.01754	-.00613	.01261	.00568
.173	300.120	-.03240	-.01722	.02314	.01196
-.138	400.670	-.03752	-.02098	.02460	.01174
.093	591.810	-.02887	-.01174	.01850	.00561
.208	802.500	-.02693	-.01113	.01970	.00461
-.594	999.610	-.02669	-.00757	.01858	.00207

RUN NO. 340/ 0 RN/L = 3.49

X	Z	CN	CLM	CY	CYN
300.340	.173	-.01468	-.00377	.00571	.00219
300.300	49.824	-.01768	-.00499	.00466	.00026
300.330	99.405	-.01598	-.00410	.00412	.00267
300.400	152.170	-.01239	-.00216	.00415	.00157
300.270	201.940	-.01149	.00056	.00387	-.00143
300.250	299.640	-.01753	-.00590	.01163	.00333
300.230	399.600	-.03566	-.02232	.02538	.01196
300.630	599.970	-.02856	-.01115	.02005	.00325
300.580	800.000	-.02632	-.01185	.01791	.00517
300.550	998.150	-.02774	-.00830	.01886	.00333

RUN NO. 341/ 0 RN/L = 3.49

X	Z	CN	CLM	CY	CYN
600.510	.097	-.01974	-.00371	.00748	.00361
600.580	52.503	-.02154	-.00628	.00559	.00157
600.480	100.200	-.01715	-.00290	.00439	-.00035
600.560	149.150	-.01467	-.00014	.00310	-.00156
600.480	198.350	-.01236	-.00064	.00570	-.00385
600.550	300.080	-.01329	-.00016	.00882	-.00209
600.280	399.810	-.02647	-.01403	.01957	.00629
600.520	602.330	-.02981	-.01458	.02242	.00380
600.520	800.880	-.02539	-.01220	.01848	.00404
600.510	999.600	-.02622	-.01108	.01920	.00449

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IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ310) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 342/ 0 RN/L = 3.49

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = .000 PCMMR = 1500.000

X	Z	CN	CLM	CY	CYN
900.690	-1.104	-0.0180	-0.00448	.00823	.00126
900.800	51.358	-0.02038	-0.00512	.00793	-0.00024
900.560	97.661	-0.02638	-0.00407	.00149	-0.00412
900.660	149.680	-0.01386	-0.00238	.00285	-0.00153
900.670	200.260	-0.01725	-0.00133	.00401	-0.00306
900.580	300.300	-0.01697	.00046	.00957	-0.00258
900.610	401.840	-0.02200	-0.00963	.01727	.00408
900.550	500.220	-0.03311	-0.02052	.02194	.00759
900.630	797.720	-0.02300	-0.01230	.01897	.00279
900.560	999.740	-0.02542	-0.01163	.01771	.00502

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 348/ 0 RN/L = 3.47

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = .000 PCMMR = 1500.000

X	Z	CN	CLM	CY	CYN
.151	-1.118	-0.03139	-0.00726	.02440	.01527
.152	50.697	-0.03341	-0.00691	.02411	.01454
.117	100.990	-0.03370	-0.00655	.02169	.01422
.186	150.970	-0.03216	-0.00671	.02120	.01251
.239	201.050	-0.02947	-0.00813	.02056	.01052
.247	300.140	-0.02628	-0.01092	.01882	.00823
.294	401.890	-0.02532	-0.01232	.02015	.00580
.348	599.970	-0.02771	-0.01018	.02077	.00404
.415	799.850	-0.02636	-0.00991	.01980	.00344
.219	998.050	-0.02352	-0.00930	.01790	.00303

DATE 02 AUG 75

1A13 SOURCE DATA

(RTJ311) ( 31 JUL 75 )

1A13,SP8(SB)WITH PLUMES SEPARATING FROM OBT10

REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 200.000 PCMR = 1500.000

RUN NO. 345/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN
300.440	-1.417	-.02942	-.00880	.03019	.01991
300.390	47.925	-.03148	-.01174	.02905	.02174
300.360	98.430	-.03237	-.01276	.03277	.02205
300.210	149.970	-.03285	-.01294	.03762	.02428
300.220	201.510	-.03407	-.01341	.03665	.02220
300.270	299.970	-.03475	-.01109	.01586	.01457
300.240	400.060	-.02796	-.00996	.01756	.00828
300.320	601.270	-.02667	-.01131	.02107	.00435
300.420	801.320	-.02610	-.01155	.01941	.00466
300.410	999.880	-.02679	-.00809	.01941	.00277

RUN NO. 344/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN
500.370	.056	-.02615	-.01008	.02649	.00874
500.400	50.624	-.02689	-.01015	.02322	.01001
500.490	103.550	-.02860	-.01006	.01934	.01230
500.510	151.720	-.02949	-.01347	.02520	.01245
500.510	200.510	-.02980	-.01352	.02560	.01382
500.470	299.980	-.03866	-.01510	.02698	.01898
500.640	399.930	-.03799	-.01518	.02552	.01475
500.620	599.960	-.02741	-.00995	.02047	.00429
500.620	799.470	-.02550	-.01250	.01870	.00513
500.500	999.390	-.02639	-.01007	.01962	.00367

RUN NO. 343/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN
900.570	-.656	-.02893	-.01003	.02247	.00806
900.650	49.147	-.02752	-.01211	.02205	.00798
900.620	99.350	-.02890	-.01493	.02413	.00817
900.690	150.670	-.03503	-.01572	.02366	.00904
900.450	199.760	-.03221	-.01498	.02164	.00955
900.660	299.970	-.03267	-.01260	.01990	.01173
900.690	400.990	-.03562	-.01219	.01935	.01209
900.740	600.450	-.02803	-.01211	.01876	.00654
900.680	799.990	-.02422	-.01181	.01854	.00426
900.580	999.770	-.02585	-.01123	.01887	.00459

(RTJ312) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 347/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN
.197	-.133	-.02655	-.00691	-.02816	.00011
.133	49.754	-.02715	-.00672	.02645	.00072
.262	99.855	-.02622	-.00751	.02484	.00135
.103	149.590	-.02473	-.00858	.02286	.00228
.211	198.930	-.02430	-.00927	.02232	.00283
.195	299.000	-.02388	-.01060	.02177	.00344
.091	398.860	-.02434	-.01104	.02139	.00382
.269	600.980	-.02596	-.01005	.02026	.00342
.279	800.760	-.02525	-.00873	.02032	.00214
.445	999.230	-.02272	-.01004	.01759	.00323

RUN NO. 348/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN
300.430	.077	-.02889	-.00486	.02873	.00328
300.320	50.075	-.02904	-.00516	.02864	.00326
300.280	100.180	-.02925	-.00520	.02746	.00315
300.350	150.470	-.02958	-.00523	.02660	.00295
300.310	200.280	-.02900	-.00594	.02484	.00322
300.340	300.520	-.02606	-.00831	.02056	.00445
300.420	400.430	-.02441	-.01026	.02004	.00479
300.320	600.220	-.02501	-.01132	.01907	.00489
300.450	799.170	-.02606	-.00980	.02035	.00287
300.430	999.410	-.02337	-.00954	.01814	.00293

RUN NO. 349/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN
600.450	-.039	-.02976	-.00682	.03759	.00517
600.410	49.914	-.03004	-.00707	.03562	.00591
600.470	99.871	-.03107	-.00714	.03331	.00594
600.490	149.800	-.03111	-.00684	.03175	.00559
600.480	200.120	-.03215	-.00635	.03008	.00535
600.540	300.040	-.03122	-.00573	.02561	.00484
600.530	399.940	-.02940	-.00634	.02122	.00468
600.620	600.000	-.02449	-.01190	.01914	.00528
600.430	800.430	-.02548	-.01133	.01947	.00428
600.520	999.900	-.02571	-.00866	.01953	.00239

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCMR = 1500.000

DATE 02 AUG 75

IA13 SOURCE DATA

PAGE 377

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ312) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. ZS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = 0100

RUN NO. 350/ 0 RN/L = 3.47

X	Z	CN	CLM	CY	CYN
900.620	.040	-.02423	-.00896	.03034	.01400
900.840	50.220	-.02428	-.01111	.02841	.01443
900.650	100.530	-.02497	-.01494	.02784	.01365
900.740	150.330	-.02762	-.01674	.02899	.01405
900.660	200.140	-.03233	-.01678	.02939	.01440
900.710	299.040	-.03294	-.01199	.02560	.01323
900.760	399.360	-.03378	-.00650	.01890	.00714
900.560	599.870	-.02457	-.01048	.01621	.03603
900.600	800.050	-.02466	-.01161	.01843	.00493
900.730	999.760	-.02617	-.00977	.01908	.00340

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCHEER = 1500.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 351/ 0 RN/L = 3.48

X	Z	CN	CLM	CY	CYN
-.736	799.500	-.02233	-.01009	.01883	.00304

RUN NO. 352/ 0 RN/L = 3.48

X	Z	CN	CLM	CY	CYN
300.410	799.870	-.02240	-.00998	.01701	.00317

RUN NO. 353/ 0 RN/L = 3.48

X	Z	CN	CLM	CY	CYN
800.520	799.990	-.02269	-.00992	.01778	.00281

RUN NO. 354/ 0 RN/L = 3.48

X	Z	CN	CLM	CY	CYN
900.620	799.900	-.02376	-.00946	.01860	.00130

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ313) ( 31 JUL 75 )

## PARAMETRIC DATA

MACH = 4.520 PTOTAL = 58.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 600.000 PCHEER = 1500.000

DATE 02 AUG 75

1A13 SOURCE DATA

1A13.SRB(S)WITH PLUMES SEPARATING FROM 09T10

(RTJ314) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y .000 PCWBR = 1500.000

RUN NO. 355/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN
.219	.056	-.01256	-.00472	.00491	.00806
.189	49.824	-.01112	-.00623	.00335	.00633
.320	99.952	-.00933	-.00221	.00159	.00417
.459	150.500	-.01149	-.00312	-.0.010	.00423
.071	199.410	-.01444	-.00799	.00698	.00887
-.093	300.400	-.03160	-.01789	.01933	.01419
-.107	400.980	-.02198	-.01320	.01101	.00802
.089	599.780	-.01953	-.00587	.01089	.00281
.201	799.790	-.02063	-.00328	.01166	.00126
-.549	999.240	-.01884	-.00207	.01064	.00062

RUN NO. 356/ 0 RN/L = 6.5

X	Z	CN	CLM	CY	CYN
300.320	-.014	-.01358	-.00421	-.00373	-.00027
300.430	49.781	-.01489	-.00355	-.00420	-.00259
300.300	99.398	-.01280	-.00188	-.00475	-.00148
300.280	151.820	-.00831	.00002	-.00559	-.00037
300.280	202.430	-.00695	.00028	-.00300	-.00033
300.250	298.960	-.01449	-.00754	.00855	.00532
300.290	398.970	-.02488	-.01749	.01584	.01033
301.000	600.170	-.02036	-.00579	.01308	.00197
300.390	797.160	-.01749	-.00651	.01052	.00263
300.580	997.570	-.02113	-.00103	.01135	.00058

RUN NO. 357/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN
600.470	1.424	-.02747	-.01379	.01001	.00671
600.290	50.257	-.02593	-.01166	.00492	.00361
600.470	100.960	-.01360	-.00239	-.00301	-.00425
600.540	149.060	-.00627	.00009	-.00269	-.00241
600.540	200.020	-.00782	.00220	-.00204	-.00345
600.590	300.480	-.01067	-.00226	.00536	.00061
600.260	399.580	-.01938	-.01236	.01181	.00650
600.430	603.450	-.02439	-.00863	.01498	.00278
600.510	800.730	-.01592	-.00792	.00943	.00313
600.530	1000.100	-.02112	-.00244	.01136	.00115

DATE 02 AUG 75

1A13 SOURCE DATA

PAGE 379

(RTJ315) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 403.0000 IN. ZS  
 SCALE = .0100

RUN NO. 358/ 0 RN/L = 8.61

X	Z	CN	CLM	CY	CYN
.136	-.417	-.01218	-.00430	.00152	.00629
.167	51.452	-.01074	-.00568	.00209	.00562
.271	100.170	-.00915	-.00222	-.00022	.00361
.331	150.640	-.01025	-.00279	.00017	.00412
.153	199.390	-.01479	-.00862	.00850	.00968
-.125	300.130	-.03165	-.01819	.01965	.01456
-.184	400.760	-.02059	-.01259	.00977	.00745
.157	599.760	-.01918	-.00573	.01049	.00281
.217	799.910	-.02034	-.00314	.01139	.00119
-.598	999.290	-.01818	-.00211	.01073	.00067

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 5.000 PCMPBR = 1500.000

RUN NO. 359/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN
300.320	.029	-.01362	-.00508	-.00428	-.00081
300.350	49.743	-.01461	-.00342	-.00500	-.00305
300.390	98.990	-.01173	-.00137	-.00572	-.00152
300.370	152.100	-.00821	.00012	-.00560	-.00032
300.280	202.570	-.00709	-.00001	-.00314	-.00018
300.170	299.060	-.01529	-.00800	.00922	.00589
300.270	398.900	-.02482	-.01765	.01596	.01045
301.040	600.220	-.02017	-.00568	.01268	.00199
300.460	797.190	-.01732	-.00641	.01032	.00261
300.550	997.650	-.02100	-.00103	.01119	.00056

RUN NO. 360/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN
600.380	.835	-.02573	-.01287	.00720	.00554
600.320	50.187	-.02586	-.01077	.00422	.00350
600.460	100.850	-.01303	-.00232	-.00340	-.00424
600.570	149.220	-.00815	-.00025	-.00301	-.00277
600.460	199.970	-.00624	.00220	-.00223	-.00351
600.610	300.410	-.01124	-.00278	.00573	.00105
600.190	399.640	-.01966	-.01242	.01168	.00677
600.440	603.270	-.02408	-.00836	.01479	.00265
600.480	800.820	-.01574	-.00787	.00960	.00320
600.520	1000.100	-.02084	-.00232	.01135	.00111



1A13,SR8181WITH PLUMES SEPARATING FROM 09110

(RTJ316) ( 31 JUL 75

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XRRP = 1167.0000 IN. XS  
 LREF = 1296.3000 INCHES YRRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 361/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN
.176	-1.013	-.01165	-.00348	.00080	.00603
.170	51.051	-.01010	-.00438	-.00184	.00342
.242	100.270	-.00853	-.00270	-.00150	.00352
.486	151.030	-.01106	-.00378	.00268	.00544
.095	199.470	-.01597	-.00977	.01129	.01088
-.113	300.300	-.03274	-.01694	.02176	.01563
-.081	400.580	-.02000	-.01199	.00940	.00709
.218	599.850	-.01950	-.00572	.01095	.00281
.129	799.870	-.02053	-.00308	.01160	.00117
-.564	959.160	-.01827	-.00226	.01032	.00072

MACH = 4.530 PTOTAL = 110.010  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 10.000 PCWPR = 1500.000

## PARAMETRIC DATA

RUN NO. 362/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.400	.003	-.01417	-.00536	-.00547	-.00187
300.390	49.976	-.01416	-.00321	-.00619	-.00380
300.350	98.430	-.01135	-.00092	-.00611	-.00177
300.410	151.920	-.00846	.00024	-.00508	-.00016
300.360	199.770	-.00738	-.00032	-.00228	.00037
300.160	298.840	-.01670	-.00881	.01022	.00671
300.190	399.050	-.02597	-.01803	.01700	.01075
300.830	600.260	-.02050	-.00569	.01307	.00200
300.470	797.020	-.01768	-.00636	.01050	.00264
300.450	997.710	-.02099	-.00100	.01113	.00054

RUN NO. 363/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.440	.422	-.02481	-.01175	.00561	.00507
600.490	50.036	-.02527	-.00981	.00406	.00336
600.440	101.000	-.01269	-.00202	-.00454	-.00423
600.480	149.130	-.00799	-.00058	-.00327	-.00346
600.600	200.050	-.00879	.00203	-.00223	-.00351
600.650	300.440	-.01274	-.00377	.00698	.00191
600.280	399.800	-.02000	-.01248	.01162	.00718
500.560	603.050	-.02372	-.00822	.01477	.00257
600.530	800.780	-.01592	-.00784	.00960	.00324
600.620	1000.300	-.02094	-.00231	.01141	.00112



DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10 (RTJ316) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 354/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.920	.079	-.02269	-.01020	.00017	-.00408
900.610	50.560	-.02391	-.01086	.00341	-.00220
900.670	98.537	-.02014	-.00585	-.00004	-.00397
900.800	149.010	-.01335	-.00437	-.00073	-.00502
900.730	199.250	-.01162	-.00101	-.00211	-.00487
900.540	299.690	-.01663	-.00499	.00559	.00459
900.570	402.700	-.02659	-.01142	.01549	.00699
900.560	596.980	-.02386	-.01090	.01357	.00379
900.580	797.170	-.01394	-.00805	.01168	.0 318
900.650	999.730	-.01827	-.00495	.01044	.00249

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 10.000 PCHMR = 1500.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 368/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.126	-.158	-.02437	-.00434	.02098	.01075
.226	51.014	-.02562	-.00434	.01695	.01068
.249	101.120	-.02598	-.00438	.01301	.00998
.218	150.790	-.02488	-.00394	.01116	.00877
.316	200.500	-.02166	-.00500	.00860	.00787
.187	301.150	-.01745	-.00628	.00853	.00551
.308	401.400	-.01665	-.00658	.01131	.00322
.417	600.060	-.01736	-.00570	.01145	.00207
.271	799.950	-.02074	-.00180	.01311	-.00011
.261	997.990	-.01592	-.00345	.01049	.00088

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 200.000 PCHMR = 1500.000

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10 (RTJ317) ( 31 JUL 75 )

DATE 02 AUG 75

IA13 SOURCE DATA  
IA13.SRBS181WITH PLUMES SEPARATING FROM 09T10

(RTJ317) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 200.000 PCHPBR = 1500.000

RUN NO. 367/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.420	-546	-0.01336	-0.00509	.02212	.01247
300.300	49.783	-0.01815	-0.00531	.02191	.01273
300.320	98.897	-0.02127	-0.00450	.02180	.01312
300.410	148.330	-0.02379	-0.00347	.01995	.01469
300.280	198.780	-0.02587	-0.00403	.01827	.01556
300.330	299.960	-0.02501	-0.00580	.01055	.01024
300.200	393.910	-0.02039	-0.00506	.00059	.00531
300.400	601.340	-0.01618	-0.00714	.01113	.00325
300.480	800.960	-0.01926	-0.00401	.01253	.00118
300.470	999.840	-0.01840	-0.00182	.01151	.00024

RUN NO. 368/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.530	.012	-0.01497	-0.00666	.01507	.00451
600.540	50.472	-0.01486	-0.00710	.01462	.00415
600.550	100.770	-0.01583	-0.00700	.01354	.00505
600.640	150.690	-0.01735	-0.00624	.00936	.00685
600.550	200.260	-0.01912	-0.00530	.00883	.00759
600.550	299.900	-0.02615	-0.00480	.01321	.00970
600.610	400.960	-0.02998	-0.00764	.01717	.00988
600.630	599.870	-0.01729	-0.00669	.01020	.00345
600.640	799.400	-0.01722	-0.00664	.01134	.00266
600.540	998.990	-0.02025	-0.00145	.01227	.00016

RUN NO. 369/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.650	-412	-0.01803	-0.00842	.01255	.00576
900.590	49.862	-0.01919	-0.00891	.01174	.00585
900.590	89.759	-0.02155	-0.00935	.00912	.00713
900.520	151.030	-0.02358	-0.01033	.00946	.00833
900.670	201.280	-0.01941	-0.00955	.00895	.00706
900.760	300.050	-0.02012	-0.00600	.00882	.00525
900.840	400.070	-0.02210	-0.00494	.01134	.00580
800.710	600.680	-0.01828	-0.00955	.01044	.00507
900.650	800.460	-0.01547	-0.00748	.01011	.00327
900.780	998.710	-0.01967	-0.00323	.01196	.00111

DATE 02 AUG 75

1A13 SOURCE DATA  
1A13,SR81581WITH PLUMES SEPARATING FROM 09T10

(RTJ318) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2600.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1200.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 400.000 PCHWR = 1500.000

RUN NO. 368/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.232	-.350	-.01418	-.00411	.01579	.00040
.280	49.571	-.01456	-.00457	.01558	.00080
.233	59.660	-.01454	-.00524	.01515	.00119
.177	149.560	-.01433	-.00579	.01461	.00138
.172	199.150	-.01428	-.00619	.01439	.00160
.220	299.510	-.01456	-.00637	.01384	.00180
.212	399.870	-.01617	-.00538	.01399	.00137
.321	600.430	-.01926	-.00200	.01512	-.00065
.262	800.170	-.01690	-.00276	.01214	-.00050
.291	999.810	-.01537	-.00383	.00991	.00078

RUN NO. 370/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.520	-.122	-.01742	-.00175	.01460	.00182
300.340	50.208	-.01788	-.00203	.01635	.00089
300.370	100.170	-.01685	-.00286	.01656	.00053
300.300	150.180	-.01638	-.00368	.01425	.00152
300.290	200.190	-.01602	-.00449	.01272	.00228
300.470	300.370	-.01502	-.00597	.01137	.00323
300.290	399.910	-.01425	-.00678	.01109	.00339
300.390	599.760	-.01780	-.00477	.01283	.00151
300.440	799.880	-.01995	-.00219	.01393	-.00062
300.400	999.540	-.01550	-.00343	.01024	.00069

RUN NO. 371/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.460	-.230	-.01850	-.00270	.02118	.00729
600.550	49.798	-.01971	-.00328	.02104	.00639
600.560	99.861	-.02112	-.00354	.02042	.00511
60.470	150.090	-.02335	-.00303	.01962	.00380
600.560	200.430	-.02354	-.00287	.01872	.00301
600.450	300.240	-.01995	-.00400	.01213	.00347
600.650	400.060	-.01636	-.00553	.00864	.00420
600.410	600.320	-.01578	-.00664	.01123	.00203
600.630	800.370	-.01917	-.00326	.01321	.00016
600.550	999.880	-.01732	-.00256	.01180	-.00025

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OF POOR QUALITY

DATE 02 AUG 75

1A13 SOURCE DATA

1A13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ318) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 372/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN
900.620	-.098	-.01346	-.00532	.01751	.01117
900.750	50.214	-.01452	-.00653	.01699	.01145
900.660	100.050	-.01726	-.00656	.01845	.01025
900.710	150.000	-.02043	-.00589	.01984	.00972
900.700	199.900	-.02242	-.00493	.02009	.00978
900.750	300.390	-.02107	-.00567	.01655	.00980
900.620	399.820	-.01917	-.00575	.00925	.00626
900.830	599.640	-.01569	-.00677	.00942	.00376
900.760	799.750	-.01581	-.00576	.01158	.00194
900.760	999.340	-.01569	-.00171	.01286	-.00036

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCHMR = 1500.000

1A13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ318) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 373/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN
-.664	798.950	-.01542	-.00353	.00930	.00053

RUN NO. 374/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN
300.440	799.990	-.01569	-.00371	.00962	.00068

RUN NO. 375/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN
600.580	799.870	-.01568	-.00359	.00976	.00058

RUN NO. 376/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN
900.680	799.860	-.01606	-.00329	.01103	-.00020

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 800.000 PCHMR = 1500.000

DATE 02 AUG 75  
1A13 SOURCE DATA  
(RTJ320) ( 31 JUL 75 )

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 377/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.253	.284	-.01681	.00182	-.00872	.00681
.172	50.206	-.01362	.00173	-.00987	.00665
.217	99.783	-.00930	.00084	-.00915	.00595
.134	149.020	-.00700	-.00061	-.00562	.00566
.243	197.520	-.00762	-.00328	-.00008	.00698
.167	299.900	-.01394	-.00912	.00806	.00851
.238	400.860	-.00944	-.00578	.00583	.00377
.255	600.930	-.01100	-.00249	.00562	.00132
.318	800.240	-.01822	.00414	.00664	-.00087
.280	1000.100	-.00454	-.00080	.00348	.00032

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = .000 PCHMR = .000

RUN NO. 378/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.420	.554	-.01328	-.00251	-.00250	.00620
300.460	49.787	-.01117	-.00183	-.00661	.00563
300.440	99.707	-.00852	-.00130	-.00813	.00545
300.520	149.810	-.00593	-.00106	-.00687	.00444
300.440	199.910	-.00202	-.00208	-.00534	.00341
300.460	300.360	-.00399	-.00202	-.00019	.00274
300.510	402.140	-.01351	-.00625	-.00757	.00462
300.430	598.750	-.00769	-.00538	.00404	.00225
300.450	799.060	-.01366	-.00150	.00604	-.00025
300.450	999.300	-.00940	.00197	.00433	-.00015

RUN NO. 379/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.520	.705	-.01399	-.00599	-.00116	.00524
600.560	50.822	-.00836	-.00584	-.00405	.00463
600.490	100.360	-.00583	-.00387	-.00554	.00394
600.510	150.370	-.00429	-.00286	-.00530	.00371
600.620	200.500	-.00364	-.00194	-.00474	.00360
600.590	299.880	-.00160	-.00184	-.00211	.00243
600.670	400.050	-.00460	-.00059	.00127	.00134
600.530	601.060	-.00824	-.00745	.00462	.00293
600.690	800.840	-.01077	-.00183	.00531	.00059
600.600	1000.100	-.01461	.00394	.00567	-.00049

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ320) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 380/ 0 RN/L = 6.63

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = .000 PCMR = .000

X	Z	CN	CLM	CY	CYN
900.740	-1.247	-.00974	-.00377	-.00002	.00005
900.740	49.679	-.00539	-.00408	-.00124	.00004
900.810	99.936	-.00309	-.00483	-.00359	.00073
900.670	149.640	-.00202	-.00400	-.00393	.00132
900.770	199.690	-.00249	-.00263	-.00252	.00149
900.720	299.690	-.00292	-.00116	-.00213	.00238
900.750	399.950	-.00218	-.00109	-.00045	.00164
900.660	601.980	-.00843	-.00619	.00498	.00243
900.730	799.350	-.00716	-.00459	.00412	.00120
900.710	999.080	-.01366	.00237	.00543	-.00018

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ321) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 384/ 0 RN/L = 6.62

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 200.000 PCMR = .000

X	Z	CN	CLM	CY	CYN
.318	-.262	-.01491	.00410	.01713	.00395
.236	50.081	-.01438	.00329	.01542	.00434
.194	100.240	-.01059	.00014	.01308	.00463
.273	150.240	-.00975	-.00095	.01106	.00479
.278	200.220	-.00892	-.00197	.00892	.00511
.189	300.060	-.00686	-.00353	.00573	.00538
.195	400.010	-.00775	-.00311	.00612	.00364
.281	599.560	-.01374	.00196	.00929	-.00114
.378	799.460	-.01168	.00274	.00717	-.00167
.269	999.900	-.00491	-.00087	.00336	.00040

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ321) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 383/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.450	-.154	-.00949	-.00024	.01324	.00690
300.440	49.932	-.01357	.00128	.01249	.00667
300.350	99.842	-.01557	.00177	.01233	.00705
300.340	149.580	-.01343	-.00034	.01346	.00724
300.460	200.060	-.01156	-.00286	.01380	.00763
300.390	300.370	-.00977	-.00399	.00829	.00667
300.390	400.160	-.00675	-.00426	.00492	.00499
300.440	600.660	-.01100	-.00129	.00710	.00119
300.510	800.230	-.01432	.00318	.00854	-.00181
300.410	999.960	-.00477	-.00074	.00340	.00038

RUN NO. 382/ 0 RN/L = 5.62

X	Z	CN	CLM	CY	CYN
600.480	.018	-.00678	-.00233	.00354	.00256
600.640	50.037	-.00796	-.00148	.00266	.00205
600.430	99.923	-.00903	-.00026	.00147	.00235
600.500	149.970	-.01011	.00079	.00200	.00221
600.520	199.950	-.01039	.00105	.00252	.00243
600.560	300.580	-.00856	-.00238	.00548	.00461
600.500	401.130	-.01056	-.00549	.00806	.00677
600.570	599.250	-.00761	-.00408	.00447	.00298
600.580	799.310	-.01241	.00108	.00752	-.00058
600.600	999.420	-.01034	.00233	.00587	-.00093

RUN NO. 381/ 0 RN/L = 5.62

X	Z	CN	CLM	CY	CYN
900.590	.102	-.00569	-.00268	-.00127	.00471
900.650	50.082	-.00515	-.00293	-.00089	.00357
900.680	100.150	-.00535	-.00257	-.00069	.00276
900.680	150.240	-.00716	-.00115	-.00089	.00242
900.660	200.220	-.00787	-.00015	-.00097	.00211
900.690	299.660	-.00856	.00098	.00103	.00154
900.650	398.890	-.00723	-.00117	.00298	.00227
900.770	600.740	-.00688	-.00602	.00433	.00428
900.730	800.710	-.01017	-.00150	.00600	.00076
900.690	999.690	-.01359	.00322	.00714	-.00123

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 200.000 PCHMBR = .000

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ322) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCHGR = .000

RUN NO. 385/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.248	-.113	-.00428	-.00047	.01006	.00193
.238	49.871	-.00528	-.00048	.00987	.00196
.261	99.894	-.00613	-.00095	.01008	.00178
.255	149.980	-.00678	-.00060	.01033	.00135
.181	200.040	-.00752	-.00050	.01075	.00070
.305	300.030	-.00923	.00025	.01173	-.00092
.379	400.380	-.01082	.00140	.01265	-.00241
.284	600.000	-.01199	.00314	.01153	-.00386
.315	799.940	-.00522	-.00073	.00312	.00025
.326	999.960	-.00522	-.00085	.00325	.00021

RUN NO. 386/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.390	.109	-.01086	.00278	.01392	.00122
300.380	50.145	-.00900	.00117	.01207	.00186
300.410	100.150	-.00680	-.00056	.00861	.00359
300.530	150.220	-.00609	-.00135	.00715	.00420
300.450	200.130	-.00589	-.00173	.00669	.00412
300.350	300.130	-.00755	-.00132	.00772	.00271
300.390	399.940	-.00936	-.00028	.00925	.00078
300.440	599.810	-.01287	.00250	.01079	-.00250
300.460	799.770	-.00837	.00111	.00626	-.00152
300.360	1000.000	-.00486	-.00073	.00343	.00023

RUN NO. 387/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.530	-.227	-.00824	.00089	.01319	.00472
600.510	49.968	-.01014	.00111	.01327	.00406
600.520	100.010	-.01082	.00104	.01219	.00371
600.510	149.950	-.00964	.00039	.00884	.00408
600.470	199.890	-.00733	-.00122	.00536	.00551
600.500	299.860	-.00618	-.00246	.00538	.00479
600.530	399.980	-.00727	-.00213	.00607	.00364
600.460	600.420	-.01137	.00038	.00890	-.00031
600.530	800.030	-.01238	.00273	.00965	-.00264
600.460	999.990	-.00525	-.00065	.00329	.00021

DATE 02 AUG 75 1A13 SOURCE DATA

(RTJ322) ( 31 JUL 75 )

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 388/ 0 RN/L = 6.82

X	Z	CN	CLM	CY	CYN
900.670	.240	-.00640	-.00087	.00909	.00702
900.680	50.268	-.00734	-.00090	.01003	.00625
900.700	100.190	-.00895	-.00074	.01057	.00555
900.690	150.200	-.01087	-.00041	.01124	.00543
900.680	200.230	-.01196	-.00041	.01159	.00580
900.690	300.240	-.00905	-.00268	.00930	.00632
900.630	399.820	-.00684	-.00310	.00365	.00521
900.690	599.940	-.00894	-.00187	.00633	.00193
900.730	799.460	-.01192	.00168	.00889	-.00150
900.670	999.670	-.00878	.00135	.00616	-.00119

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 400.000 PCMBR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 389/ 0 RN/L = 6.82

X	Z	CN	CLM	CY	CYN
.263	800.120	-.00557	-.00057	.00308	-.00004

RUN NO. 390/ 0 RN/L = 6.82

X	Z	CN	CLM	CY	CYN
300.390	800.030	-.00548	-.00062	.00290	.00000

RUN NO. 391/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN
800.410	800.000	-.00529	-.00071	.00277	.00017

RUN NO. 392/ 0 RN/L = 6.82

X	Z	CN	CLM	CY	CYN
900.760	799.900	-.00522	-.00064	.00277	.00014

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = .000  
Y = 800.000 PCMBR = .000

(RTJ323) ( 31 JUL 75 )

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ324) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. X5  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y5  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z5  
 SCALE = .0100

RUN NO. 393/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
1601.100	800.170	-.00954	.00156	.00945	-.00274

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 800.000 PCMBR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ325) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. X5  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y5  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z5  
 SCALE = .0100

RUN NO. 394/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
1600.900	-.055	-.00499	-.00188	.00052	.00419
1601.100	50.080	-.00510	-.00179	.00115	.00363
1601.100	99.953	-.00533	-.00166	.00136	.00314
1601.000	150.060	-.00528	-.00170	.00148	.00274
1600.900	199.970	-.00552	-.00163	.00153	.00239
1601.000	300.050	-.00795	-.00038	.00272	.00155
1601.100	398.940	-.00968	.00059	.00353	.00116
1601.100	600.500	-.00751	-.00501	.00581	.00473
1601.000	800.420	-.00777	-.00270	.00539	.00219
1601.100	1000.200	-.01184	.00135	.00728	-.00052

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = .000  
 Y = 400.000 PCMBR = .000

(RTJ326) ( 31 JUL 75 )

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = .000  
Y = .000 PCHMBR = .000

RUN NO. 395/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
.295	.245	.00784	.00363	-.00191	.00536
.228	50.233	.00977	.00357	-.00023	.00298
.184	99.965	.01153	.00401	.00007	.00199
.289	149.330	.01340	.00368	.00163	.00266
.403	198.170	.01430	.00100	.00459	.00476
.215	300.010	.00844	-.00294	.01048	.00732
.335	400.620	.01332	-.00147	.00691	.00387
.201	600.030	.00445	.00556	.00945	-.00149

RUN NO. 396/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
900.670	.303	.00984	-.00095	-.00462	.00131
900.660	50.049	.01197	-.00069	-.00493	.00178
900.750	100.190	.01284	-.00050	-.00419	.00203
900.630	150.000	.01326	.00014	-.00232	.00238
900.960	200.400	.01344	.00052	-.00073	.00228
900.610	300.610	.01295	.00249	.00214	.00061
900.820	398.350	.01442	.00463	.00257	-.00040
900.530	600.260	.01438	-.00194	.00578	.00239

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM OST10 (RTJ327) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 396/ 0 RN/L = 6.64

X	Z	CN	LLM	CY	CYN
.440	-2.01	.01495	.00754	.01434	.00524
.220	50.356	.01467	.00684	.01149	.00591
.343	100.230	.01643	.00494	.00837	.00701
.243	150.240	.01743	.00316	.00543	.00733
.316	200.330	.01780	.00163	.00576	.00701
.122	300.410	.01695	.00051	.00733	.00439
.228	400.230	.01313	.00153	.01145	.00006
.400	599.430	.00532	.00773	.00997	-.00281

RUN NO. 399/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
900.670	-.868	.01300	.00132	.00078	.00301
900.650	49.955	.01074	.00270	.00080	.00201
900.550	99.868	.01005	.00341	.00155	.00110
900.620	149.840	.00967	.00422	.00247	.00013
900.840	199.770	.01036	.00465	.00347	-.00048
900.810	299.530	.01289	.00524	.00433	.00008
900.760	400.070	.01575	.00339	.00485	.00265
900.490	601.200	.01281	-.00053	.00711	.00319

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = .000  
 Y = 200.000 PCMRBR = .000

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ328) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.000' SQ.FT. XMRP = 1187.0000 IN. AS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 100.0000 IN. ZS  
 SCALE = .0100

RUN NO. 397/ 0 RN/L = 8.64

X	Z	CN	CLM	CY	CYN
.303	-.087	.02162	.00108	.00796	.00246
.378	49.864	.02105	.00163	.00890	.00190
.282	99.887	.02005	.00151	.01017	.00091
.288	149.690	.01859	.00159	.01144	-.00012
.391	199.850	.01663	.00198	.01267	-.00124
.261	300.080	.01233	.00373	.01469	-.00362
.240	400.110	.00824	.00631	.01382	-.00452
.377	599.550	.01337	.00454	.00408	-.00040

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = 000 BETA = .000  
 DALPHA = 5.000 DBETA = .000  
 Y = 400.000 PCMRBR = .000

RUN NO. 400/ 0 RN/L = 8.74

X	Z	CN	CLM	CY	CYN
900.580	.146	.01340	.00629	.01448	.00501
900.650	49.892	.01182	.00669	.01382	.00501
900.690	99.888	.01080	.00684	.01218	.00529
900.680	149.930	.01190	.00564	.01052	.00646
900.680	199.570	.01370	.00403	.00982	.00741
900.610	300.010	.01453	.00215	.00760	.00770
900.760	399.600	.01541	.00196	.00533	.00500
900.660	599.290	.01154	.00265	.01036	-.00098

ORIGINAL PAGE IS  
 OF POOR QUALITY

DATE 02 AUG 75

1A13 SOURCE DATA

(RTJ329) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = .000 PCMBR = .000

RUN NO. 411/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.343	50.042	-.03950	-.00218	.01355	.00109
.293	99.585	-.03910	-.00154	.00556	.00325
.244	148.710	-.03751	-.00277	.00069	.00554
.286	200.140	-.03803	-.00558	.00329	.00847
.224	299.940	-.04075	-.01530	.00434	.01072
.338	401.960	-.04225	-.00964	.00726	.00408
.340	601.090	-.03658	-.00678	.00354	.00249
.291	800.750	-.03841	-.00126	.00512	.00043
.275	1000.100	-.03625	.00089	.00471	-.00018

RUN NO. 409/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.360	.061	-.04090	-.00515	.01623	.00384
300.390	50.384	-.03784	-.00550	.00940	.00303
300.470	100.530	-.03249	-.00615	.00267	.00263
300.420	150.480	-.02857	-.00535	-.00270	.00319
300.380	199.390	-.02617	-.00428	-.00497	.00382
300.370	300.150	-.02354	-.00740	-.00066	.00412
300.490	401.510	-.03568	-.01400	.00538	.00565
300.400	601.160	-.03765	-.00833	.00713	.00171
300.570	801.040	-.03628	-.00416	.00391	.00115
300.440	1000.000	-.03949	.00141	.00467	-.00016

RUN NO. 401/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.660	51.258	-.03752	-.00870	.00696	.00398
600.760	100.700	-.02766	-.00909	.00256	.00247
600.610	150.400	-.02200	-.00892	-.00196	.00251
600.680	200.650	-.02082	-.00758	-.00501	.00311
600.510	299.540	-.02081	-.00529	-.00431	.00342
600.650	400.140	-.02148	-.00715	.00077	.00260
600.770	601.720	-.03944	-.01127	.00474	.00329
600.830	801.140	-.03489	-.00666	.00294	.00172
600.700	999.970	-.03622	-.00117	.00463	.00023

DATE 02 AUG 75

1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ329) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 402/ 0 RN/L = 6.63

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = .000  
Y = .000 PCMBR = .000

X	Z	CN	CLM	CY	CYN
900.460	48.262	-.02873	-.00693	.00874	-.00148
900.790	99.887	-.02449	-.00785	.00540	-.00220
900.750	149.610	-.01978	-.00879	.00216	-.00162
900.710	199.680	-.01711	-.00680	-.00101	.00008
900.670	299.400	-.01781	-.00624	-.00196	.00131
900.680	400.100	-.02098	-.00476	-.00154	.00215
900.770	599.770	-.03394	-.01110	.00629	.00342
900.700	799.310	-.03432	-.00803	.00512	.00127
900.610	998.740	-.03408	-.00344	.00401	.00064

(RTJ330) ( 31 JUL 75 )

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 412/ 0 RN/L = 6.63

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = .000  
Y = 200.000 PCMBR = .000

X	Z	CN	CLM	CY	CYN
.340	50.483	-.03756	-.00452	.02014	.00422
.384	100.330	-.04429	-.00174	.02046	.00317
.246	150.110	-.04511	-.00177	.01697	.00269
.350	200.040	-.04074	-.00449	.01748	.00283
.344	300.110	-.03884	-.00562	.01182	.00358
.331	399.610	-.03624	-.00598	.00682	.00373
.187	599.170	-.03554	-.00326	.00482	.00178
.253	799.260	-.03907	-.00131	.00741	-.00135
.380	999.660	-.02733	-.00392	.00356	.00009

ORIGINAL PAGE IS  
OF POOR QUALITY



(RTJ330) ( 31 JUL 75 )

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

KACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 200.000 PCAMBR = .000

RUN NO. 403/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.400	-.297	-.02929	-.00782	.01717	.00740
300.250	49.714	-.03035	-.00833	.01782	.00631
300.310	99.707	-.03375	-.00804	.01800	.00596
300.420	149.700	-.04116	-.00553	.01580	.00711
300.390	199.710	-.04308	-.00507	.01508	.00771
300.470	300.630	-.03928	-.00829	.01346	.00603
300.420	400.670	-.03822	-.00680	.00977	.00346
300.530	600.890	-.03608	-.00555	.00310	.00318
300.530	800.660	-.03700	-.00144	.00589	.00007
300.460	1000.200	-.03509	.00034	.00603	-.00113

RUN NO. 404/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.490	-.160	-.03061	-.00673	.00783	.00230
600.440	49.898	-.02982	-.00671	.00809	.00162
600.540	99.906	-.02812	-.00670	.00735	.00137
600.480	150.090	-.02726	-.00695	.00764	.00144
600.490	200.070	-.03008	-.00586	.00775	.00195
600.630	300.940	-.03635	-.00632	.01005	.00433
600.700	401.290	-.03838	-.01038	.00987	.00635
600.520	598.820	-.03579	-.00716	.00578	.00262
600.430	798.960	-.03448	-.00392	.00415	.00140
600.470	999.090	-.03674	.00052	.00597	-.00076

RUN NO. 405/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.750	.267	-.03091	-.00642	.00031	.00441
900.670	50.255	-.02891	-.00630	-.00098	.00407
900.780	100.260	-.02858	-.00592	.00008	.00321
900.650	150.150	-.02745	-.00597	.00104	.00233
900.740	200.090	-.02648	-.00593	.00194	.00170
900.640	299.350	-.02853	-.00448	.00290	.00186
900.550	398.310	-.03268	-.00490	.00608	.00226
900.930	601.150	-.03801	-.00890	.00693	.00354
900.830	800.910	-.03410	-.00608	.00306	.00239
900.690	1000.300	-.03564	-.00154	.00522	.00009

DATE 02 AUG 75

1A13 SOURCE DATA

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## REFERENCE DATA

SREF = 2650.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ331) ( 31 JUL 75 )

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = .000  
Y = 400.000 PCHMR = .000

RUN NO. 410/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.178	-.106	-.03271	-.00140	.01355	-.00079
.117	49.886	-.03324	-.00173	.00944	.00127
.179	100.010	-.03284	-.00266	.00617	.00324
.198	150.010	-.03311	-.00291	.00574	.00337
.260	199.990	-.03318	-.00300	.00586	.00309
.253	300.190	-.03385	-.00262	.00633	.00204
.260	400.310	-.03439	-.00184	.00768	.00054
.283	500.140	-.03590	.00036	.01012	-.00250
.155	799.910	-.03093	-.00187	.00690	-.00195
.349	999.980	-.02671	-.00428	.00290	.00027

RUN NO. 406/ 0 RN/L = 5.63

X	Z	CN	CLM	CY	CYN
300.370	-.175	-.03507	-.00205	.01334	.00142
300.350	50.258	-.03646	-.00210	.01392	.00101
300.390	100.260	-.03770	-.00197	.01278	.00127
300.520	150.130	-.03778	-.00224	.01026	.00202
300.370	200.020	-.03572	-.00346	.00711	.00346
300.410	300.040	-.03394	-.00456	.00348	.00464
300.400	399.080	-.03411	-.00390	.00390	.00358
300.420	599.580	-.03541	-.00140	.00701	.00001
300.380	799.550	-.03617	.00054	.00904	-.00261
300.470	999.740	-.02670	-.00416	.00312	.00021

RUN NO. 407/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.510	-.198	-.03337	-.00398	.01184	.00624
600.520	49.868	-.03421	-.00453	.01240	.00564
600.440	93.898	-.03570	-.00452	.01270	.00465
600.470	149.990	-.03744	-.00408	.01174	.00360
600.450	199.980	-.03867	-.00357	.01208	.00272
600.480	300.150	-.03661	-.00455	.00839	.00312
600.540	400.270	-.03455	-.00534	.00533	.00391
600.600	600.600	-.03521	-.00360	.00387	.00242
600.640	800.430	-.03565	-.00082	.00711	-.00085
600.630	999.780	-.03182	-.00130	.00551	-.00155

DATE 02 AUG 75 1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORT10

(RTJ331) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 406/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.600	.002	-.02938	-.00596	.01151	.00816
900.710	50.373	-.03010	-.00882	.01240	.00748
900.580	100.440	-.03109	-.00736	.01215	.00697
900.670	150.350	-.03279	-.00773	.01235	.00691
900.760	200.270	-.03525	-.00749	.01184	.00684
900.750	300.110	-.03920	-.00567	.01360	.00536
900.650	399.810	-.03687	-.00594	.00784	.00350
900.710	599.690	-.03476	-.00540	.00345	.00339
900.670	799.200	-.03420	-.00265	.00487	.00079
900.760	999.460	-.03554	.00022	.00598	-.00151

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = .000  
Y = 400.000 PCMR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 413/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.330	830.120	-.02732	-.00384	.00213	.00002

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = .000  
Y = 800.000 PCMR = .000

RUN NO. 414/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.400	800.000	-.02729	-.00399	.00254	.00007

RUN NO. 415/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
800.450	800.010	-.02730	-.00402	.00262	.00009

RUN NO. 416/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.500	799.930	-.02708	-.00393	.00267	.00011

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IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM OGT10

(RTJ333) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 800.000 PCHMR = .000

RUN NO. 417/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
1.361	802.180	-.06145	-.00473	.00120	.00082

RUN NO. 418/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.350	799.960	-.06171	-.00464	.00098	.00065

RUN NO. 419/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.440	800.070	-.06178	-.00470	.00123	.00083

RUN NO. 420/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.680	799.970	-.06311	-.00397	.00381	-.00079

ORIGINAL PAGE IS  
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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ334) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
Y = 400.000 PCMRB = .000

RUN NO. 421/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN
.110	.038	-.06555	-.00232	.01391	-.00212
.078	50.000	-.06759	-.00203	.01314	-.00141
.108	99.902	-.06906	-.00214	.01195	-.00049
.203	150.060	-.06989	-.00257	.00983	.00081
.202	200.100	-.06982	-.00314	.00748	.00222
.256	300.020	-.07094	-.00289	.00721	.00209
.288	400.450	-.07193	-.00224	.00744	.00137
.288	600.210	-.07307	.00014	.00898	-.00115
.203	800.060	-.07250	.00077	.00955	-.00296
1.311	1002.200	-.06153	-.00508	.00254	.00067

RUN NO. 422/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN
300.530	1.069	-.07096	-.00260	.01690	-.00013
300.430	50.552	-.07189	-.00336	.01555	.00053
300.390	100.380	-.07285	-.00361	.01528	.00061
300.430	150.450	-.07383	-.00369	.01491	.00049
300.310	200.310	-.07465	-.00348	.01437	.00043
300.310	300.090	-.07320	-.00441	.00968	.00171
300.320	399.960	-.07068	-.00522	.00516	.00341
300.310	599.600	-.07256	-.00232	.00628	.00114
300.260	799.710	-.07391	.00041	.00780	-.00128
300.280	999.720	-.06853	-.00097	.00702	-.00194

RUN NO. 423/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN
600.430	-.142	-.07077	-.00569	.01724	.00470
600.450	49.977	-.07215	-.00625	.01719	.00467
600.410	100.080	-.07341	-.00659	.01610	.00444
600.490	150.150	-.07426	-.00660	.01560	.00381
600.350	200.300	-.07546	-.00621	.01678	.00289
600.490	300.300	-.07742	-.00466	.01758	.00089
600.520	400.540	-.07529	-.00495	.01142	.00161
600.630	600.630	-.07150	-.00520	.00524	.00263
600.700	800.600	-.07310	-.00170	.00681	.00014
600.570	1000.300	-.07357	.00090	.00667	-.00135

REFERENCE DATA  
 SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 424/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN
900.820	.781	-.06891	-.00860	.02089	.00735
900.720	50.492	-.07017	-.00913	.01914	.00736
900.730	100.550	-.07137	-.00968	.01882	.00697
900.810	150.590	-.07207	-.01054	.01838	.00658
900.800	200.510	-.07319	-.01087	.01818	.00642
900.770	300.090	-.07533	-.00994	.01405	.00605
900.730	399.590	-.07853	-.00627	.01298	.00305
900.620	599.250	-.07168	-.00696	.00787	.00209
900.670	799.420	-.07120	-.00407	.00462	.00166
900.750	999.440	-.07259	-.00068	.00563	-.00031

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10  
 (RTJ335) ( 31 JUL 75 )

REFERENCE DATA  
 SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 425/ 0 RN/L = 8.82

X	Z	CN	CLM	CY	CYN
.315	200.300	-.08144	-.00753	.01885	.00564
.229	299.990	-.08261	-.01471	.01069	.00996
.586	402.780	-.07721	-.01426	.01209	.00534
.477	601.120	-.07344	-.00879	.00546	.00226
.528	801.070	-.07291	-.00489	.00521	.00106
1.484	1002.600	-.07768	.00217	.00494	.00006

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 400.000 PCHMR = .000

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 400.000 PCHMR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = .000 PCMRBR = .000

RUN NO. 427/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.490	100.810	-.07054	-.00723	.01890	.00229
300.490	150.560	-.06528	-.00732	.01206	.00179
300.410	199.560	-.05957	-.00769	.00683	.00197
300.450	300.160	-.05826	-.00921	.00025	.00449
300.470	401.420	-.06737	-.01754	.00387	.00679
300.640	601.270	-.07551	-.00996	.00972	.00162
300.670	801.220	-.07203	-.00697	.00459	.00125
301.710	1002.900	-.07433	-.00098	.00455	.00041

RUN NO. 429/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.610	150.810	-.05530	-.01143	.00543	.00328
600.680	200.930	-.04949	-.01145	.00187	.00253
600.460	299.560	-.04689	-.00954	-.00522	.00380
600.510	400.290	-.05317	-.00872	-.00358	.00447
600.920	601.860	-.07269	-.01594	.00653	.00410
600.750	801.210	-.07261	-.00826	.00136	.00138
601.810	1003.300	-.07214	-.00385	.00419	.00090

RUN NO. 432/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.830	200.810	-.04684	-.00917	.00286	-.00137
900.620	299.810	-.04222	-.01037	-.00306	.00103
900.650	400.170	-.04555	-.00878	-.00474	.00290
900.670	600.160	-.06244	-.01586	.00464	.00335
901.000	801.220	-.07366	-.00923	.00558	.00149
902.100	1003.700	-.07050	-.00630	.00408	.00120

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ336) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
Y = 200.000 PCMPBR = .000

RUN NO. 428/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.220	200.200	-.08716	-.00210	.02653	.00116
.278	299.950	-.08079	-.00472	.02130	.00108
.208	399.820	-.07514	-.00682	.01220	.00223
.055	599.100	-.07168	-.00548	.00513	.00250
.119	799.310	-.07481	-.00072	.00646	-.00012
.259	999.350	-.07508	.00202	.00669	-.00144

RUN NO. 428/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.650	102.030	-.07315	-.01249	.02534	.00716
300.440	150.530	-.07373	-.01284	.02458	.00598
300.380	200.490	-.07576	-.01264	.02299	.00549
300.300	300.130	-.08167	-.00928	.01805	.00591
300.250	399.220	-.07958	-.00707	.01563	.00257
300.220	599.020	-.07238	-.00719	.00604	.00242
300.280	799.200	-.07244	-.00377	.00504	.00114
300.290	999.150	-.07521	.00133	.00580	-.00059

RUN NO. 430/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.570	50.373	-.06601	-.01005	.01556	.00084
600.610	100.390	-.06600	-.00924	.01363	.00062
600.580	150.090	-.06390	-.00920	.01188	.00093
600.460	198.950	-.06383	-.00954	.01136	.00102
600.330	298.620	-.06977	-.01102	.01349	.00299
600.870	401.270	-.07896	-.01112	.01095	.00635
600.720	601.010	-.07618	-.00771	.01090	.00167
600.860	801.010	-.07154	-.00632	.00482	.00183
601.840	1002.800	-.07328	-.00127	.00531	.00016



IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ336) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 431/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.770	.880	-.06665	-.00910	.00971	.00279
900.800	50.338	-.08154	-.00878	.00705	.00228
900.660	100.310	-.06171	-.00805	.00539	.00214
900.620	150.260	-.06128	-.00788	.00354	.00209
900.640	200.230	-.06113	-.00758	.00412	.00174
900.450	299.190	-.06111	-.00765	.00455	.00149
900.210	397.980	-.06604	-.00830	.00506	.00242
900.960	601.510	-.07647	-.01113	.00887	.00409
900.970	800.990	-.07159	-.00766	.00534	.00186
901.950	1003.300	-.07183	-.00375	.00487	.00102

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 200.000 PCMBR = .000

## PARAMETRIC DATA

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 433/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.471	601.940	-.16478	-.01395	.00765	.00421
.540	801.220	-.16720	-.00861	.00344	.00304
-.039	999.780	-.16829	-.00399	.00358	.00183

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = .000 PCMBR = .000

## PARAMETRIC DATA

RUN NO. 434/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.400	599.920	-.15693	-.01823	-.00222	.00839
300.110	799.170	-.16494	-.01061	.00100	.00403
300.230	999.240	-.16694	-.00579	.00313	.00169

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = .000 PCMBR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ337) ( 31 JUL 75 )

RUN NO. 435/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
800.700	601.080	-.14857	-.02445	-.00825	.00981
800.900	801.210	-.15833	-.01595	-.00060	.00516
800.540	1000.400	-.16812	-.00628	.00313	.00187

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = .000 PCMBR = .000

## PARAMETRIC DATA

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ337) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 436/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
899.730	597.720	-.13197	-.02328	-.00653	.00516
901.310	802.060	-.15490	-.01844	-.00146	.00572
900.270	999.100	-.16673	-.00784	.00181	.00263

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = .000 PCWBR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 440/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
-.057	599.690	-.17471	-.00438	.01144	.00166
-.033	799.490	-.16942	-.00412	.00622	.00181
-.120	999.180	-.17401	.00240	.00551	.00052

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 200.000 PCWBR = .000

RUN NO. 439/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.640	601.120	-.18242	-.00276	.00943	.00350
300.750	801.260	-.17224	-.00481	.00726	.00172
300.290	999.680	-.16972	-.00197	.00435	.00151

RUN NO. 438/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.080	599.370	-.17818	-.00806	.00617	.00569
600.050	798.940	-.17245	-.00572	.00567	.00255
600.150	999.320	-.16738	-.00466	.00433	.00177

RUN NO. 437/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
801.080	601.970	-.17050	-.01586	.00562	.00130
900.940	801.200	-.17598	-.00563	.00447	.00389
900.460	999.690	-.16907	-.00517	.00496	.00173

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ339) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 441/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.358	600.670	-.17356	.00172	.01207	-.00088
.378	800.750	-.17574	.00465	.01003	-.00154
-.018	999.220	-.17464	.03629	.00930	-.00275

RUN NO. 442/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.510	601.080	-.17379	-.00221	.01106	.00082
300.110	799.800	-.17331	.00108	.00752	.00053
300.100	999.410	-.17537	.00510	.00704	-.00094

RUN NO. 443/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.700	601.040	-.18094	-.00044	.01553	-.00039
600.780	801.060	-.17102	-.00278	.00691	.00168
600.610	1000.600	-.17352	.00191	.00575	.00045

RUN NO. 444/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.850	600.980	-.18125	-.00734	.01210	.00296
900.280	799.180	-.17152	-.00385	.00846	.00104
900.390	999.360	-.16973	-.00190	.00426	.00163

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ340) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 445/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
-.057	799.870	-.15594	-.00278	-.00100	.00145

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = 400.000 PCMPBR = .003

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = 800.000 PCMPBR = .000

DATE 02 AUG 75 1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ340) (31 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 446/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.410	800.280	-.15828	-.00258	-.00101	.00144

RUN NO. 447/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.540	800.380	-.15709	-.00237	.00062	.00051

RUN NO. 448/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.580	800.350	-.16352	.00089	.00805	-.00316

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ341) (31 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 449/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.195	.271	-.01768	.00339	-.02045	-.00078
.151	50.106	-.01664	.00420	-.01932	-.00222
.302	99.767	-.01244	.00297	-.01934	-.00299
.296	149.030	-.01035	.00154	-.01947	-.00218
.230	200.170	-.01173	-.00084	-.01652	-.00022
.237	299.920	-.01646	-.00786	-.01155	.00136
.217	401.320	-.00897	-.00673	-.01951	-.00671
.218	600.840	-.01340	-.00029	-.02055	-.00084
.321	800.030	-.01521	.00427	-.01270	-.00553
.237	1000.100	-.00571	-.00052	-.01692	-.00364

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
Y = .000 PCHMBR = .000

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 800.000 PCHMBR = .000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SR8(S8) W/O PLUMES SEPARATING FROM 09T10

(RTJ341) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2 .0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 452/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.530	.130	-.01500	-.00237	-.02646	.00088
900.700	49.905	-.01244	-.00293	-.02677	.00077
900.720	100.370	-.01146	-.00328	-.02582	.00077
900.590	150.620	-.01026	-.00218	-.02501	.00100
900.680	200.580	-.00835	-.00118	-.02358	.00090
900.690	300.350	-.00747	.00064	-.01993	-.00079
900.610	400.060	-.00624	.00141	-.01800	-.00290
900.620	600.950	-.01156	-.00578	-.01686	-.00318
900.690	800.870	-.00765	-.00408	-.02124	-.00203
900.610	1000.100	-.01532	.00369	-.01597	-.00356

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
Y = .000 PCMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 453/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
-.132	-.829	-.00813	.00173	-.00471	-.00134
.187	50.402	-.00751	-.00019	-.00868	.00051
.122	100.240	-.00787	.00122	-.01114	.00151
.176	150.260	-.00768	-.00187	-.01255	.00190
.267	200.160	-.00856	-.00214	-.01358	.00158
.271	300.130	-.01077	-.00144	-.01430	.00032
.292	399.830	-.01282	.00032	-.01457	-.00142
.262	599.360	-.01470	.00394	-.01040	-.00610
.394	800.000	-.00613	-.00028	-.01632	-.00394
.280	1000.000	-.00580	-.00053	-.01848	-.00355

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
Y = .000 PCMR = .000

1A13 SR8(S8) W/O PLUMES SEPARATING FROM 09T10

(RTJ342) ( 31 JUL 75 )

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ342) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 453/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.500	-.826	-.00815	-.00207	-.01760	-.00052
900.610	49.924	-.00792	-.00170	-.01904	-.00061
900.680	99.874	-.00855	-.00044	-.01911	-.00131
900.630	149.890	-.01008	.00131	-.01823	-.00254
900.570	199.900	-.01113	.00256	-.01719	-.00383
900.690	300.050	-.00908	.00137	-.01750	-.00451
900.570	400.740	-.00905	-.00140	-.01840	-.00300
900.580	600.960	-.00917	-.00521	-.01771	-.00067
900.670	798.940	-.01163	.00052	-.01689	-.00232
900.570	999.510	-.01117	.00256	-.01262	-.00575

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
Y = 200.000 PCMBR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 451/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.117	-.003	-.00408	-.00036	-.00381	-.00714
.203	49.985	-.00517	.00010	-.00413	-.00707
.227	99.913	-.00843	.00046	-.00435	-.00710
.228	149.950	-.00750	.00081	-.00465	-.00722
.240	199.950	-.00837	.00115	-.00503	-.00746
.176	300.040	-.00915	.00176	-.00566	-.00797
.106	400.070	-.00864	.00159	-.00734	-.00814
.270	599.660	-.00596	.00028	-.01639	-.00408
.190	799.930	-.00583	-.00040	-.01704	-.00379
.263	1000.000	-.00582	-.00049	-.01682	-.00369

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = 5.000  
Y = 400.000 PCMBR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ343) ( 31 JUL 75 )

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ343) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 454/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.660	-.247	-.00773	.00132	-.00841	.00002
900.600	49.769	-.00831	.00079	-.00895	-.00024
900.650	99.717	-.00907	.00018	-.00535	-.00021
900.600	149.720	-.00930	-.00081	-.00908	.00047
900.590	199.760	-.00922	-.00200	-.01092	.00193
900.570	300.210	-.00909	-.00317	-.01310	.00276
900.640	400.370	-.00926	-.00245	-.01497	.00012
900.620	600.420	-.01214	.00080	-.01447	-.00247
900.640	800.120	-.01150	.00241	-.01106	-.00610
900.650	1000.000	-.00566	-.00029	-.01700	-.00356

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = 5.000  
 Y = 400.000 PCMBR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 455/ 0 RN/L = 8.12

X	Z	CN	CLM	CY	CYN
.214	-.168	-.01676	.00380	.04288	.01432
.184	49.811	-.01410	.00184	.03911	.01536
.220	99.750	-.01081	-.00064	.03640	.01376
.294	149.780	-.01142	-.00120	.03885	.01169
.208	199.830	-.01345	-.00082	.04016	.00928
.326	300.250	-.01275	-.00152	.03734	.00768
.405	400.390	-.00786	-.00344	.03468	.00677
.341	600.530	-.00884	-.00143	.03302	.00255
.245	800.160	-.01541	.00421	.03102	.00031
.259	999.980	-.00501	-.00068	.02478	.00358

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 Y = 200.000 PCMBR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ344) (31 JUL 75)

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ344) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XSRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YSRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZSRP = 400.0000 IN. ZS  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = -5.000  
Y = 200.000 PCHMBR = .000

RUN NO. 456/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.140	.107	-.01049	-.00047	.03020	.01609
300.440	50.108	-.01262	.00005	.02849	.01691
300.400	100.160	-.01302	-.00028	.02757	.01759
300.570	150.220	-.01014	-.00276	.03008	.01735
300.360	200.380	-.01030	-.00412	.03433	.01608
300.460	300.370	-.01286	-.00390	.03812	.01175
300.340	399.460	-.01055	-.00295	.03365	.00849
300.320	599.440	-.00570	-.00381	.03185	.00478
300.380	799.520	-.01197	-.00138	.03178	.00061
300.480	999.540	-.00697	.00057	.02531	.00335

RUN NO. 457/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.570	.163	-.00591	-.00342	.01930	.01004
600.460	50.023	-.00559	-.00243	.01576	.01004
600.490	100.020	-.00591	-.00198	.01526	.00999
600.470	149.930	-.00637	-.00152	.01561	.01008
600.380	199.410	-.00631	-.00162	.01693	.00995
600.290	299.040	-.00940	-.00257	.02581	.01039
600.730	400.660	-.01209	-.00490	.03481	.01173
600.570	600.470	-.00838	-.00387	.03179	.00846
600.650	800.530	-.00886	-.00144	.03161	.00224
600.630	999.990	-.01359	.00383	.02871	.00158

RUN NO. 458/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.560	-.091	-.00343	-.00383	.01395	.01123
900.660	50.019	-.00171	-.00464	.01327	.00973
900.670	99.861	-.00217	-.00396	.01325	.01879
900.680	149.890	-.00328	-.00278	.01339	.00818
900.630	199.940	-.00428	-.00183	.01378	.00805
900.720	299.970	-.00454	-.00164	.01767	.00757
900.690	400.470	-.00846	-.00158	.02437	.00758
900.730	601.080	-.01022	-.00530	.03234	.00842
900.530	798.990	-.00512	-.00374	.03061	.00412
900.600	999.430	-.01230	.00209	.03074	.00111



IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

IRIJ3451 31 JUL 75 1

## REFERENCE DATA

SREF = 2895.0000 50.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 Y = 400.000 PCMBR = .000

RUN NO. 462/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.118	-.286	-.01096	.00310	.04497	.00150
.231	50.105	-.00811	.00103	.04157	.00329
.261	102.130	-.00766	.00026	.03943	.00359
.259	150.180	-.00739	-.00036	.03672	.00500
.136	200.160	-.00634	-.00115	.03416	.00576
.172	299.960	-.00587	-.00161	.03275	.00516
.126	399.960	-.00699	-.00115	.03307	.00336
.130	599.730	-.01168	.00221	.03506	-.00099
.236	799.740	-.00833	.00113	.02640	.00233
.346	1000.100	-.00510	-.00072	.02452	.00348

RUN NO. 461/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.400	-.021	-.01130	.00201	.04360	.00528
300.410	49.998	-.01298	.00272	.04237	.00530
300.370	99.827	-.01190	.00186	.04045	.00574
300.430	150.100	-.00995	.00034	.03859	.00603
300.380	199.990	-.00862	-.00043	.03760	.00591
300.450	299.870	-.00644	-.00164	.03420	.00633
300.430	400.100	-.00595	-.00221	.03238	.00585
300.430	600.150	-.00906	-.00017	.03315	.00166
300.450	800.050	-.01349	.00341	.03216	-.00051
300.440	999.860	-.00508	-.00064	.02431	.00348

RUN NO. 460/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.620	.021	-.00652	-.00090	.03891	.01292
600.440	50.239	-.00884	-.00054	.03853	.01226
600.540	100.140	-.01078	.00011	.03903	.01071
600.520	149.970	-.01094	.00045	.03890	.00914
600.500	200.040	-.01066	.00041	.03745	.00810
600.550	300.260	-.01100	-.00037	.03553	.00723
600.490	399.940	-.00825	-.00170	.03305	.00691
600.540	599.870	-.00662	-.00227	.03107	.00418
600.480	799.710	-.01107	.00137	.03223	.00014
600.340	999.610	-.00780	.00091	.02590	.00280

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IA13 SOURCE DATA

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IA13 SR8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ345)

(31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 459/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.620	-0.311	-0.00462	-0.00169	.03309	.01337
900.650	49.793	-0.00529	-0.00232	.03237	.01299
900.580	99.834	-0.00713	-0.00219	.03255	.01278
900.520	149.960	-0.00914	-0.0072	.03346	.01255
900.600	199.670	-0.01073	-0.0131	.03560	.01210
900.740	300.250	-0.01287	-0.0167	.03682	.01150
900.710	400.170	-0.01011	-0.00206	.03495	.00824
900.730	600.300	-0.00637	-0.00328	.03088	.00609
900.620	800.380	-0.00867	-0.00070	.03141	.00203
900.740	999.770	-0.01293	.00321	.03034	.00068

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 Y = 400.000 PCMRBR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 463/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.323	401.730	-0.01575	-0.00457	.03387	.00881
.392	600.680	-0.00602	-0.00475	.03335	.00384
.203	800.360	-0.01496	.00301	.03028	.00100
.369	999.960	-0.00499	-0.00065	.02491	.00356

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 Y = .000 PCMRBR = .000

RUN NO. 464/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.480	339.880	-0.01295	-0.00609	.03028	.01011
300.420	599.830	-0.00922	-0.00488	.03183	.00548
300.400	798.890	-0.01015	-0.00060	.03068	.00158
300.410	999.210	-0.01149	.00295	.02505	.00344

IA13 SR8(S8) W/O PLUMES SEPARATING FROM ORTIO

(RTJ346) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 465/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.310	397.530	-.00397	-.00161	.02037	.00548
600.600	601.450	-.01197	-.00711	.03126	.00770
600.650	800.620	-.00614	-.00390	.03161	.00331
600.510	1000.200	-.01458	.00368	.02847	.00185

RUN NO. 466/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.550	399.580	.00030	-.00235	.01866	.00480
900.850	602.370	-.01281	-.00497	.02814	.00743
800.600	798.960	-.00548	-.00515	.03085	.00449
900.570	999.120	-.01134	.00087	.02975	.00182

IA13 SR8(S8) W/O PLUMES SEPARATING FROM ORTIO

(RTJ347) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.7000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 467/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.245	800.190	-.00537	-.00061	.02309	.00366

RUN NO. 468/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.290	799.980	-.00538	-.00095	.02311	.00348

RUN NO. 469/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
600.480	799.970	-.00548	-.00053	.02320	.00331

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 Y = .000 PCMPBR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 Y = 800.000 PCMPBR = .000

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IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM ORT10

(RTJ347) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 470/ 0 RN/L = 8.83

X	Z	CN	CLM	CY	CYN
900.670	800.030	-.00662	.00009	.02482	.00247

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -5.000  
 Y = 800.000 PCMR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM ORT10

(RTJ348) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 471/ 0 RN/L = 8.83

X	Z	CN	CLM	CY	CYN
.236	399.850	-.02224	-.00405	.06982	.01102
.480	600.810	-.00910	-.00389	.06970	.00465
.231	800.280	-.01524	.00309	.06681	.00050
.114	1000.000	-.00612	-.00044	.05974	.00407

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -10.000  
 Y = .000 PCMR = .000

RUN NO. 472/ 0 RN/L = 8.83

X	Z	CN	CLM	CY	CYN
300.210	359.280	-.01754	-.00505	.06511	.01308
300.250	598.580	-.01423	-.00382	.06715	.00751
300.150	798.560	-.01080	-.00043	.06822	.00086
300.340	999.170	-.01017	.00216	.05968	.00440

RUN NO. 473/ 0 RN/L = 8.83

X	Z	CN	CLM	CY	CYN
800.360	400.050	-.00590	-.00126	.05488	.00645
800.940	601.860	-.01835	-.00638	.06792	.01032
600.810	800.820	-.00923	-.00284	.06868	.00316
600.660	1000.000	-.01388	.00343	.06490	.00177

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IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

(RTJ348) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 474/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.440	399.290	.00028	-.00211	.05119	.00518
900.520	599.850	-.01883	-.00395	.06466	.01000
900.550	798.760	-.00934	-.00417	.06718	.00579
900.490	998.790	-.01118	.00098	.06726	.00119

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -10.000  
 Y = .000 PCMRB = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

(RTJ349) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 475/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
.283	199.710	-.01113	-.00360	.06567	.01829
.375	300.660	-.01931	-.00029	.07322	.01043
.469	400.400	-.01062	-.00296	.07071	.00903
.541	600.590	-.00358	-.00182	.07094	.00323
.301	800.140	-.01536	.00375	.06838	-.00036
.177	1000.000	-.00603	-.00054	.05967	.00414

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -10.000  
 Y = 200.000 PCMRB = .000

RUN NO. 477/ 0 RN/L = 5.64

X	Z	CN	CLM	CY	CYN
300.370	-.133	-.01158	-.00094	.05796	.02268
300.430	49.849	-.01215	-.00096	.05538	.02295
300.360	99.863	-.01268	-.00101	.05387	.02327
300.010	149.800	-.00943	-.00324	.05357	.02405
300.380	198.980	-.00555	-.00567	.05832	.02325
300.580	300.470	-.01414	-.00531	.06811	.01759
300.690	400.750	-.01675	-.00221	.07100	.01115
300.640	600.510	-.00936	-.00307	.06954	.00612
300.460	800.440	-.01277	.00102	.06945	.00028
300.320	1000.100	-.00920	.00151	.06013	.00407

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1A13 SOURCE DATA

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1A13 SRB(58) W/O PLUMES SEPARATING FROM 08T10

(RTJ349) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 478/ 0 RN/L = 5.64

X	Z	CN	CLM	CY	CYN
600.600	-.052	-.00793	-.00369	.04284	.01424
600.420	49.601	-.00532	-.00330	.04076	.01309
600.480	99.841	-.00426	-.00301	.04074	.01339
600.550	150.110	-.00420	-.00271	.04254	.01334
600.610	199.960	-.00406	-.00233	.04413	.01448
600.960	300.770	-.00821	-.00378	.05511	.01579
600.850	400.840	-.01155	-.00519	.06697	.01597
600.230	599.650	-.01332	-.00264	.06702	.00845
600.330	799.190	-.00995	-.00133	.06829	.00248
600.430	999.160	-.01390	.00367	.06637	.00101

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -10.000  
 Y = 200.000 PCMMBR = .000

RUN NO. 479/ 0 RN/L = 5.64

X	Z	CN	CLM	CY	CYN
900.820	.274	-.00905	-.00239	.04969	.00688
900.710	50.209	-.00575	-.00305	.04674	.00667
900.550	100.150	-.00086	-.00333	.04496	.00714
900.700	150.140	-.00116	-.00345	.04581	.00671
900.580	200.020	-.00273	-.00222	.04677	.00694
900.420	299.400	-.00385	-.00157	.04720	.00933
900.150	398.250	-.00607	-.00258	.05394	.01094
901.020	601.020	-.01443	-.00472	.06202	.01080
900.350	800.580	-.00951	-.00269	.06805	.00500
900.890	1000.100	-.01254	.00172	.06854	.00075

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ350) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. YMRP = 1167.0000 IN. YS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BRP = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -10.000  
 Y = 400.000 PCMPBR = .000

RUN NO. 476/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.176	-.056	-.01379	.00381	.07935	.00648
.272	49.826	-.01140	.00238	.07656	.00750
.308	99.824	-.00925	.00072	.07508	.00773
.348	149.840	-.00938	.00026	.07465	.00738
.275	193.850	-.00975	.00004	.07365	.00681
.289	300.020	-.00938	-.00073	.07121	.00664
.442	400.220	-.00842	-.00139	.07045	.00543
.479	600.150	-.01175	.00129	.07212	.00013
.379	799.940	-.01353	.00343	.06592	.02048
.162	1000.200	-.00598	-.00061	.05873	.00407

RUN NO. 482/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.270	-.331	-.01095	.00199	.07662	.01082
300.310	50.053	-.01081	.00167	.07452	.01156
300.340	100.110	-.01046	.00093	.07388	.01147
300.260	150.160	-.00950	-.00009	.07205	.01084
300.320	200.100	-.00892	-.00077	.07281	.00951
300.220	300.050	-.00929	-.00380	.07258	.00774
300.280	400.080	-.00950	-.00116	.06982	.00753
300.190	599.800	-.00946	-.00081	.06957	.00308
300.170	799.510	-.01374	.00282	.06997	-.00128
300.470	999.650	-.00605	-.00040	.05993	.00418

RUN NO. 481/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.500	-.232	-.00829	-.00077	.07445	.01852
600.490	49.979	-.01030	-.00063	.07036	.01847
600.600	99.831	-.01020	-.00079	.06967	.01759
600.620	150.010	-.01189	-.00038	.06898	.01622
600.590	199.800	-.01173	-.00057	.06957	.01404
600.590	300.320	-.01378	-.00034	.07268	.01013
600.710	399.870	-.00977	-.00123	.07166	.00863
600.770	600.240	-.00913	-.00130	.06841	.00593
600.690	810.390	-.01193	.00004	.06981	.00090
600.630	993.700	-.01173	.00275	.05422	.00184

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IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ350) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BRREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 480/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.460	.042	-.00616	-.00179	.05993	.02073
900.580	50.267	-.00653	-.00233	.06052	.01953
900.640	100.140	-.00925	-.00212	.06110	.01878
900.670	150.120	-.00885	-.00214	.06227	.01847
900.700	200.150	-.00998	-.00197	.06407	.01821
900.730	300.290	-.01070	-.00297	.06750	.01658
900.500	400.050	-.01264	-.00215	.07051	.01159
900.370	599.520	-.00863	-.00262	.06727	.00779
900.440	799.600	-.00962	-.00090	.06848	.00262
900.510	999.410	-.01315	.00290	.06840	-.00008

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -10.000  
 Y = 400.000 PCHMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BRREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 483/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
.084	800.170	-.00590	-.00052	.05782	.00420

RUN NO. 484/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
300.440	799.960	-.00598	-.00049	.05789	.00420

RUN NO. 485/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.590	799.890	-.00741	.00045	.05898	.00334

RUN NO. 486/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
900.640	800.060	-.01114	.00222	.06845	-.00180

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -10.000  
 Y = 800.000 PCHMR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ351) ( 31 JUL 75 )



1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ352) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 487/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
- .601	800.220	-.00684	-.00013	.19207	.00192

RUN NO. 488/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
300.250	799.990	-.01411	.00372	.16494	-.00568

RUN NO. 489/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
800.870	799.830	-.01371	.00291	.17289	-.00866

RUN NO. 490/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
900.710	800.030	-.01327	.00187	.17084	-.00637

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 494/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.097	299.780	-.01132	-.00097	.16132	.01118
.592	400.170	-.01052	-.00192	.16441	.00837
-.019	599.830	-.01384	.00046	.16994	-.00011
.422	800.080	-.01772	.00483	.16921	-.00628
-.737	1000.100	-.00611	-.00065	.15412	.00092

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -.20.000  
 Y = 800.000 PCMR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -.20.000  
 Y = 400.000 PCMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ353) ( 31 JUL 75 )

DATE 02 AUG 75

IA13 SOURCE DATA

PAGE 421

IA13 SR8(SB) W/O PLUMES SEPARATING FROM ORT10

(RTJ353) ( 31 JUL 75 )

## REFERENCE DATA

BREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOVAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = .000 DBETA = -20.000  
 Y = 400.000 PC-HBR = .000

RUN NO. 491/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.550	-0.006	-0.01357	.00166	.12598	.03686
300.280	49.782	-0.01035	-0.00004	.12194	.03682
300.270	99.621	-0.00652	-0.00275	.12311	.03512
300.180	149.870	-0.00379	-0.00481	.12931	.03095
300.180	199.860	-0.00260	-0.00552	.13842	.02638
300.060	299.890	-0.00424	-0.00498	.15171	.01720
300.630	399.850	-0.00988	-0.00228	.16310	.01069
300.080	599.830	-0.01271	-0.01116	.16592	.00406
300.670	800.560	-0.01638	.00272	.17128	-.00548
299.390	1000.200	-.00827	.00093	.15470	.00107

RUN NO. 492/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.160	.248	-.00781	-.00278	.11884	.03858
600.220	50.031	-.00359	-.00491	.12232	.03489
600.370	99.983	-.00220	-.00540	.12800	.03140
600.430	150.180	-.00297	-.00552	.13301	.02677
600.400	199.980	-.00312	-.00579	.13798	.02602
600.430	299.950	-.00262	-.00607	.14574	.02159
600.540	400.210	-.00781	-.00425	.15948	.01350
600.060	600.050	-.01250	-.00191	.16325	.00675
600.030	799.530	-.01458	.00090	.16922	-.00242
600.160	999.100	-.01510	.00421	.16537	-.00711

RUN NO. 493/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.500	.016	-.00693	-.00280	.11970	.03004
900.520	50.092	-.00274	-.00443	.12213	.02749
900.370	99.303	-.00120	-.00470	.12746	.02446
900.210	149.840	-.00053	-.00496	.13242	.02293
900.090	199.600	-.00178	-.00518	.13812	.02195
900.210	299.410	-.00530	-.00474	.14732	.02111
900.850	400.060	-.00686	-.00610	.15543	.01815
900.900	600.280	-.01282	-.00254	.16480	.00829
901.080	800.590	-.01300	-.00098	.16858	.00135
900.900	1000.200	-.01528	.00306	.17007	-.00474

ORIGINAL PAGE IS  
 OF POOR QUALITY

1A13 SRB(SB) W/O PLUMS SEPARATING FROM ORTIO

(RTJ354) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XSRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YSRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZSRP = 400.0000 IN. ZS  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = .000 DBETA = -20.000  
Y = .000 PCMBR = .000

RUN NO. 495/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.145	399.880	-.01942	-.00895	.17113	.01125
1.174	601.820	-.02535	.00187	.17122	.00041
.282	800.010	-.01419	.00346	.15704	-.00018
-.620	1000.100	-.00580	-.00054	.15480	.00100

RUN NO. 496/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
299.780	397.580	-.01174	-.00608	.15988	.01353
300.020	599.870	-.02332	-.00346	.16960	.00463
300.500	800.030	-.01784	.00308	.16418	-.00236
300.130	998.920	-.00550	-.00043	.15570	.00120

RUN NO. 499/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.620	400.040	-.00472	.00059	.14719	.00306
600.360	599.790	-.02190	-.00874	.17110	.00996
601.010	801.430	-.02225	.00212	.16905	-.00139
599.490	1000.100	-.01140	.00264	.15845	.00077

RUN NO. 500/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
899.990	399.750	-.00424	.00070	.14258	-.00004
900.240	599.980	-.01297	-.00594	.16295	.01130
900.180	799.910	-.02078	-.00187	.16982	.00177
899.980	997.730	-.01401	.00290	.16324	-.00185

DATE 02 AUG 75

1A13 SOURCE DATA

1A13 SRB(68) W/O PLUMES SEPARATING FROM ORT10

(RTJ355) 1 31 JUL 75

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DELTA = .000 DBETA = -20.000  
 Y = 200.000 PCFMR = .000

RUN NO. 498/ 0 RN/L = 8.64

X	Z	CN	CLM	CY	CYN
.049	400.400	-.01328	-.00451	.16414	.01074
-.221	598.800	-.01789	.00021	.16976	.00134
-.490	798.700	-.01733	.00453	.16467	-.00415
.296	999.600	-.00601	-.00065	.15535	.00098

RUN NO. 497/ 0 RN/L = 8.64

X	Z	CN	CLM	CY	CYN
300.910	400.230	-.01189	-.00540	.16495	.01315
300.210	599.850	-.01609	-.00240	.16781	.00563
300.680	800.790	-.01804	.00289	.16854	-.00366
300.370	999.840	-.00770	.00079	.15488	.00134

RUN NO. 502/ 0 RN/L = 8.64

X	Z	CN	CLM	CY	CYN
600.610	199.960	.00696	-.00665	.11525	.01434
600.610	300.000	.00244	-.00512	.13766	.01486
600.710	399.440	-.00815	-.00621	.15968	.01551
600.250	599.870	-.01462	-.00472	.15509	.00089
600.970	801.030	-.01822	.00086	.17048	-.00127
599.610	1000.200	-.01491	.00395	.16286	-.00260

RUN NO. 501/ 0 RN/L = 8.64

X	Z	CN	CLM	CY	CYN
900.760	.471	-.00984	-.00234	.08165	.01958
900.270	50.553	-.00215	-.00323	.07867	.01865
900.150	100.220	.00914	-.00659	.09057	.01352
900.240	150.060	.00581	-.00398	.10657	.00732
899.620	200.090	.00510	-.00341	.11125	.00755
900.850	299.970	.00464	-.00292	.12986	.00631
900.880	400.080	-.00004	-.00329	.14363	.00995
900.300	599.860	-.01615	-.00626	.16561	.01167
900.420	799.820	-.01577	-.00177	.16865	.00256
899.690	1000.200	-.01565	.00301	.16718	-.00321

1A13,SR8(SB)WITH PLUMES SEPARATING FROM 08T10

(RTJ358) ( 31 JUL 75 )

## REFERENCE DATA

SRF = 2990.0000 50.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BRF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = .000  
 Y = .000 PCWPR = 1500.000

RUN NO. 511/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
.314	-.058	-.00157	-.01083	.00868	.00083
.457	49.815	.00268	-.00868	.00636	-.00313
.370	99.868	.00745	-.00282	.00493	-.00411
.319	150.120	.01149	.00014	.00199	-.00362
.348	200.370	.01570	.00064	.00323	-.00213
.517	298.580	.00962	-.00943	.01301	.00691
.191	400.360	-.00595	-.02179	.02535	.01502
-.675	600.400	-.00320	-.00859	.01754	.00539

RUN NO. 514/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
900.750	-.152	-.00578	-.00526	.01517	.00352
900.770	50.138	-.01261	-.00565	.00666	.00218
900.670	100.420	-.01812	-.00440	.00499	-.00008
900.770	150.390	-.00239	-.00217	.00084	-.00397
900.670	200.050	.00222	-.00087	.00165	-.00592
900.820	299.970	.00708	.00200	.00855	-.00568
900.930	398.280	.01241	-.00155	.01059	-.00635
899.820	600.290	-.00824	-.02329	.02229	.01299

DATE 02 AUG 75

IA13 SOURCE DATA

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(RTJ359) ( 31 JUL 75 )

REFERENCE DATA

SREF = 1890.0000 SQ.FT. XHSP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YHSP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZHSP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 512/ 0 RV/L = 1.77

X	Z	CN	CLM	CY	CYN
.259	.119	.00157	-.00779	.03630	.01391
.321	50.589	.00389	-.00856	.03515	.01256
.285	100.790	.00462	-.00918	.03311	.01310
.311	150.560	.00643	-.01119	.02899	.01310
.284	200.850	.00872	-.01222	.02713	.01325
.396	301.030	.00950	-.00916	.02376	.01077
.310	400.730	.00290	-.00835	.02173	.00730
.397	599.930	-.00015	-.00694	.02003	.00400

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DRETA = .000  
 Y = 200.000 PCHMR = 1500.000

RUN NO. 515/ 0 RV/L = 1.77

X	Z	CN	CLM	CY	CYN
900.700	-1.273	-.00423	-.00904	.02656	.00944
900.830	50.382	-.00141	-.00544	-.00106	-.00328
900.800	100.000	.00147	-.00435	.0106	-.00399
900.710	150.330	.00310	-.00365	-.002	-.00257
900.800	200.200	.00304	-.00325	.00087	-.00031
900.650	300.440	.00041	-.00674	.02421	.01153
900.680	400.960	-.00770	-.01437	.03635	.01817
900.820	597.730	.00879	-.01157	.01847	.00866

ORIGINAL PAGE IS  
 OF POOR QUALITY

DATE 08 AUG 78

IA13 SOURCE DATA

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IA13,SRB1S81WITH PLUMES SEPARATING FROM 09T10

(RTJ380) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = .000  
 Y = 400.000 PCHGR = 1500.000

RUN NO. 513/ 0 RN/L = 1.73

X	Z	CN	CLM	CY	CYN
.305	-.065	.00933	-.00523	.02364	.00431
.248	49.669	.01027	-.00603	.02219	.00483
.233	99.362	.01180	-.00719	.02143	.00510
.397	149.260	.01241	-.00799	.02080	.00529
.245	198.640	.01139	-.00773	.02037	.00521
.347	299.400	.00711	-.00726	.02058	.00418
.193	399.990	.00312	-.00624	.02064	.00298
.375	598.750	.00410	-.00663	.01691	.00378

RUN NO. 516/ 0 RN/L = 1.73

X	Z	CN	CLM	CY	CYN
900.740	-.056	.00792	-.00731	.03050	.01545
900.750	49.878	.00309	-.00681	.03002	.01701
900.740	99.639	.00010	-.00718	.02904	.01843
900.840	149.850	.00319	-.00841	.02888	.01850
900.720	200.730	-.00541	-.00966	.02897	.01895
900.770	300.030	-.00720	-.00934	.02775	.01518
900.760	400.280	.00714	-.00831	.02134	.00863
900.820	599.250	.01016	-.00952	.01688	.00643

DATE 02 AUG 75

1A13 SOURCE DATA

PAGE 427

1A13.SRB1581581 WITH PLUMES SEPARATING FROM 09T10

(RTJ361) (31 JUL 75)

## REFERENCE DATA

CREF = 2590.0000 SQ.FT. XRRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = .000 PCHMBR = 1500.000

RUN NO. 527/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
.426	49.985	-.03064	-.01080	.00699	.00547
.299	99.879	-.02494	-.00905	.00743	.00349
.381	150.030	-.01884	-.00626	.00197	.00188
.382	200.320	-.01421	-.00691	.00658	.00094
.315	300.330	-.03153	-.01431	.00843	.00601
.134	400.060	-.06666	-.02893	.01760	.01541
.220	601.890	-.04581	-.02402	.01672	.00812
.317	801.280	-.04631	-.02074	.01620	.00864
-.610	1000.100	-.04261	-.02133	.01701	.00672

RUN NO. 525/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
300.540	.072	-.01427	-.00635	.00484	.00636
300.330	51.724	-.01967	-.00911	.01188	.01106
300.540	9.056	-.02152	-.00751	.00751	.00599
300.420	147.640	-.01486	-.00267	-.00012	.00042
300.500	200.250	-.01626	-.00153	-.00199	-.00001
300.360	297.980	-.02794	-.00644	.00360	.00236
300.370	399.990	-.04428	-.02250	.01492	.00950
300.350	600.000	-.04304	-.02436	.01420	.00560
300.90	801.490	-.04855	-.02119	.01542	.00782
299.610	1000.100	-.04419	-.02150	.01562	.00760

RUN NO. 517/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
600.690	51.181	-.02153	-.01306	.01408	.01032
600.720	100.510	-.01115	-.00857	.00830	.00615
600.640	149.130	-.00774	-.00393	-.00143	.00057
600.640	198.490	-.01354	-.00260	-.00286	.00049
600.630	299.750	-.01337	-.00500	.00270	.00025
600.390	397.510	-.02706	-.01290	.00868	.00531
600.540	600.220	-.04636	-.03528	.02592	.00866
600.740	801.150	-.04939	-.02041	.01339	.00724
599.840	999.890	-.04570	-.02166	.01574	.00783



(RTJ381) ( 31 JUL 75 )

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 518/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
900.840	49.929	-.01386	-.00833	.01831	.00428
900.740	100.210	-.01798	-.01161	.00576	.00205
900.700	149.770	-.00478	-.00683	.00523	-.00270
900.920	199.440	-.00490	-.00499	.00388	-.00223
900.740	300.440	-.01027	-.00490	.00166	.00002
900.850	400.970	-.02192	-.00787	.00556	.00321
900.690	599.970	-.06623	-.04464	.02906	.01167
900.900	800.130	-.04644	-.02156	.01244	.00582
900.640	999.590	-.04469	-.02175	.01508	.00708

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = .000 PCMPR = 1500.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 528/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
.282	50.056	-.04898	-.02029	.01964	.01931
.258	100.470	-.05386	-.01901	.01863	.02022
.209	151.170	-.04959	-.02234	.02149	.02033
.203	201.030	-.05001	-.02308	.02230	.01882
.302	301.920	-.04781	-.02250	.01732	.01426
.204	400.680	-.04392	-.02348	.01445	.01070
.337	600.010	-.04712	-.02270	.02068	.00736
.396	799.980	-.04602	-.02166	.02240	.00614
.350	998.830	-.04288	-.02154	.01783	.00579

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 200.000 PCMPR = 1500.000

(RTJ362) ( 31 JUL 75 )

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13.SRB(SB)WITH PLUMES SEPARATING FROM OST10

(RTJ362) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 L-REF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 200.000 PCMMR = 1500.000

RUN NO. 519/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
300.410	-1.124	-.05041	-.02436	.03302	.02001
300.430	48.975	-.05361	-.02649	.03467	.02246
300.470	99.930	-.05510	-.02679	.03483	.02422
300.370	149.570	-.05659	-.02571	.03200	.02493
300.360	199.120	-.05818	-.02698	.03120	.02394
300.440	300.670	-.06183	-.03008	.03298	.02225
300.370	400.230	-.05719	-.02335	.01394	.01755
300.410	609.180	-.04552	-.02280	.01803	.00852
300.540	801.380	-.04683	-.02163	.01958	.00708
299.530	1000.100	-.04337	-.02233	.01933	.00660

RUN NO. 520/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
600.600	.083	-.04453	-.02235	.02384	.01308
600.580	50.112	-.03890	-.01867	.01211	.00831
600.630	100.240	-.03519	-.01852	.01232	.00734
600.620	149.890	-.03104	-.01719	.01291	.00779
600.690	200.980	-.03818	-.02314	.02296	.01345
600.630	301.680	-.04884	-.03345	.03485	.01828
600.650	401.110	-.06358	-.03827	.03346	.02193
600.780	600.000	-.04477	-.02156	.01480	.00739
600.640	799.730	-.04603	-.02166	.01632	.00777
600.690	999.090	-.04430	-.02218	.01792	.00719

RUN NO. 521/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
900.780	1.169	-.05100	-.02458	.02181	.01726
900.750	50.086	-.02851	-.01268	.00250	.00149
900.820	99.789	-.02611	-.01083	.00062	.00000
900.780	149.890	-.02453	-.01017	-.00018	-.00088
900.720	199.890	-.02401	-.00932	-.00125	.00037
900.670	297.940	-.03253	-.01975	.01640	.00856
900.620	399.910	-.05022	-.03329	.03215	.01629
900.420	601.520	-.05355	-.02587	.01432	.01332
900.760	800.260	-.04566	-.02120	.01413	.00784
900.800	999.740	-.04452	-.02199	.01616	.00733

ORIGINAL PAGE IS  
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(RTJ363) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 400.000 PCMR = 1500.000

RUN NO. 526/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
.274	-.286	-.04082	-.02176	.03242	.00128
.259	49.715	-.04269	-.02194	-.03041	.00272
.271	99.643	-.04268	-.02150	.02698	.00435
.304	149.570	-.04308	-.02097	.02412	.00536
.177	199.010	-.04334	-.02072	.02258	.00567
.195	298.980	-.04301	-.02165	.02118	.00677
.229	399.070	-.04402	-.02195	.02102	.00670
.288	599.690	-.04628	-.02139	.02297	.00501
.374	800.950	-.04360	-.02251	.01990	.00553
-.610	1000.100	-.04200	-.02171	.01639	.00523

RUN NO. 524/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
300.450	.101	-.04285	-.02145	.02851	.00700
300.460	50.150	-.04283	-.02128	.02545	.00788
300.440	100.300	-.04319	-.02016	.02342	.00821
300.490	150.370	-.04337	-.01869	.02193	.00920
300.310	200.470	-.04496	-.01774	.02134	.00807
300.340	300.740	-.04498	-.01853	.02108	.00677
300.430	400.840	-.04401	-.02032	.02065	.00668
300.460	600.570	-.04627	-.02159	.01977	.00711
300.470	799.830	-.04479	-.02230	.02026	.00627
300.550	999.000	-.04204	-.02202	.01771	.00583

RUN NO. 523/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
600.470	-.251	-.04681	-.02076	.02702	.01358
600.570	49.894	-.04833	-.02093	.02702	.01345
600.590	99.904	-.04848	-.02099	.02760	.01276
600.610	149.790	-.04697	-.02132	.02637	.01186
600.540	199.770	-.04685	-.02111	.02375	.01175
600.660	299.970	-.04827	-.01902	.02038	.01078
600.540	399.960	-.04820	-.01852	.01807	.00892
600.650	600.670	-.04773	-.02092	.01898	.00796
600.650	800.330	-.04560	-.02157	.01809	.00714
600.660	1000.100	-.04302	-.02249	.01818	.00677

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ363) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 522/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
900.750	.129	-.04668	-.02630	.03734	.01095
900.830	50.266	-.04984	-.02595	.03509	.01347
900.810	100.160	-.05101	-.02612	.03413	.01478
900.710	150.310	-.05268	-.02771	.03147	.01499
900.740	200.270	-.05500	-.02839	.03714	.01444
900.700	299.980	-.05882	-.02726	.03943	.01291
900.790	399.630	-.05123	-.02005	.01443	.01429
900.670	599.660	-.04621	-.02124	.01782	.00768
900.710	800.040	-.04461	-.02179	.01671	.00742
900.750	999.950	-.04438	-.02246	.01790	.00708

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 400.000 PCMBR = 1500.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 529/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
- 571	799.960	-.04261	-.02215	.01653	.00508

RUN NO. 530/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
300.430	799.580	-.04212	-.02191	.01709	.00459

RUN NO. 531/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
800.620	800.220	-.04393	-.02253	.01705	.00420

RUN NO. 532/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
900.810	800.080	-.04303	-.02321	.01794	.00502

(RTJ364) ( 31 JUL 75 )

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = .000  
 Y = 800.000 PCMBR = 1500.000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB1581 WITH PLUMES SEPARATING FROM 09T10

(RTJ365) (31 JUL 75)

REFERENCE DATA

SREF = 2690.0000 50.FT. XHRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YHRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZHRP = 400.0000 IN. ZS  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
Y = 800.000 PCWBR = 1500.000

RUN NO. 533/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
-0.646	800.130	-0.06844	-0.02333	.00919	.00920

RUN NO. 534/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
300.440	799.530	-0.06877	-0.02322	.00991	.00890

RUN NO. 535/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
800.640	900.150	-0.06883	-0.02381	.01112	.00767

RUN NO. 536/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
900.620	800.210	-0.06912	-0.02400	.01379	.00796

DATE 02 AUG 75 1A13 SOURCE DATA

1A13.SRB(SB)WITH PLUPES SEPARATING FROM ORT10

(RTJ368) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2898.0000 SQ.FT. XPRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 400.000 PCHEER = 1500.000

RUN NO. 537/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
.290	.038	-.06094	-.02872	.03226	.00323
.361	49.923	-.06217	-.02844	.03134	.00366
.257	99.944	-.06372	-.02778	.02795	.00538
.312	149.860	-.06545	-.02685	.02468	.00665
.367	199.400	-.06710	-.02591	.02221	.00748
.206	298.780	-.06845	-.02511	.02086	.00753
.265	398.360	-.06884	-.02586	.02327	.00612
.215	600.150	-.07067	-.02509	.02509	.00541
.325	801.180	-.07071	-.02308	.01612	.00853
-.681	1000.400	-.06972	-.02248	.01052	.00933

RUN NO. 538/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
300.610	1.073	-.06110	-.02787	.02875	.00790
300.410	50.174	-.06243	-.02713	.02591	.00980
300.500	100.410	-.06222	-.02642	.02323	.00925
300.470	150.420	-.06280	-.02540	.01976	.00954
300.430	200.380	-.06360	-.02430	.01728	.01038
300.510	300.980	-.06682	-.02341	.01365	.01078
300.500	400.900	-.06695	-.02369	.01384	.01032
300.460	600.960	-.07048	-.02431	.01808	.00813
300.440	799.850	-.07124	-.02285	.01495	.00896
300.520	998.870	-.06950	-.02253	.01095	.00996

RUN NO. 539/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
300.640	-.161	-.06391	-.02597	.02851	.01111
600.520	49.932	-.06652	-.02659	.03080	.01076
600.190	100.000	-.06809	-.02668	.02593	.01172
600.520	150.000	-.06740	-.02742	.02967	.01146
600.560	199.650	-.06649	-.02714	.02679	.01182
670.660	299.880	-.06574	-.02644	.02135	.01123
600.480	398.749	-.06580	-.02511	.01333	.01196
600.650	600.630	-.07117	-.02329	.01434	.01003
600.590	800.050	-.07133	-.02280	.01322	.01010
600.630	999.500	-.06957	-.02312	.01259	.01025

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10 (RTJ366) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 540/ 0 RN/L = 1.76

X	Z	CN	CLM	CY	CYN
900.640	1.191	-.06722	-.03343	.03313	.01145
900.740	50.402	-.07009	-.03331	.03546	.01245
900.680	100.390	-.07172	-.03308	.03490	.01282
900.760	150.410	-.07599	-.03347	.03947	.01306
900.620	200.220	-.07709	-.03362	.04504	.01258
900.570	300.250	-.07684	-.03183	.04699	.01246
900.690	399.780	-.06843	-.02816	.02350	.01340
900.800	599.640	-.06997	-.02446	.01239	.01160
900.760	799.720	-.06915	-.02357	.01158	.01006
900.770	999.980	-.06963	-.02368	.01277	.00993

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 400.000 PCHMR = 1500.000

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10 (R 1357) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 541/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
.246	200.280	-.03631	-.00605	.00625	.00099
.323	300.210	-.04568	-.01579	.01011	.00317
.093	400.140	-.07107	-.03380	.01631	.01171
.348	601.150	-.06848	-.02882	.01440	.00915
.325	801.010	-.07142	-.02362	.01437	.00981
-.759	1000.200	-.07225	-.02141	.00952	.01095

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 400.000 PCHMR = 1500.000

DATE 02 AUG 75

IA13 SOURCE DATA

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(RTJ367) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = .000 PCMBR = 1500.000

RUN NO. 543/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
300.580	99.949	-.02767	-.01046	.01148	.00833
300.520	147.900	-.02428	-.00597	.00379	.00244
300.400	200.310	-.02371	-.00416	-.00213	.00053
300.520	300.230	-.02850	-.00813	-.00006	.00232
300.430	400.140	-.05364	-.02207	.00724	.00825
300.250	600.020	-.06832	-.02866	.01480	.00755
300.453	801.320	-.06932	-.02487	.01175	.00879
299.520	1000.200	-.07141	-.02221	.01030	.01053

RUN NO. 545/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
600.560	149.290	-.01390	-.00594	.00204	.00306
600.510	198.230	-.01333	-.00516	-.00323	.00123
600.370	298.390	-.01850	-.00761	-.00002	.00104
600.700	400.110	-.03687	-.01413	.00119	.00606
600.480	600.090	-.09142	-.04777	.02747	.01533
600.660	801.370	-.07393	-.02319	.00918	.00888
599.640	1000.100	-.06945	-.02351	.01030	.01004

RUN NO. 548/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
900.660	199.570	-.00517	-.00574	.00500	-.00151
900.520	299.020	-.01158	-.00739	.00223	-.00061
900.870	400.190	-.02596	-.01129	.00240	.00292
900.640	600.020	-.08417	-.04616	.02408	.01321
900.830	800.460	-.06618	-.02524	.01004	.01704
899.800	1000.100	-.06937	-.02409	.01049	.01939



1A13.SR8(S8)WITH PLUMES SEPARATING FROM 08110

(RTJ368) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 P'TOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = .000  
Y = 200.000 PCHMR = 1500.000

RUN NO. 542/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
.323	199.910	-.06948	-.02778	.02477	.02115
.288	302.310	-.08308	-.02698	.02011	.01507
.280	400.790	-.06588	-.02733	.01294	.01323
.380	600.880	-.06800	-.02782	.02090	.00823
.502	800.050	-.07046	-.02381	.01589	.00940
.344	998.960	-.07095	-.02190	.00972	.01046

RUN NO. 544/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
300.300	100.210	-.08069	-.03437	.03894	.02277
300.360	150.350	-.07843	-.03283	.03220	.02187
300.380	200.440	-.07901	-.03320	.02971	.02142
300.450	301.580	-.08784	-.03592	.02937	.02262
300.380	399.500	-.08728	-.03178	.02482	.01511
300.600	600.010	-.06543	-.02631	.01394	.00991
300.470	799.730	-.07007	-.02388	.01504	.00864
300.530	1000.100	-.07017	-.02276	.01282	.01008

RUN NO. 546/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
600.750	50.407	-.06142	-.02186	.00515	.00672
600.630	100.070	-.05386	-.01833	.00297	.00481
600.570	149.010	-.05197	-.01838	.00531	.00753
600.490	198.220	-.05974	-.02223	.01260	.01240
600.430	298.940	-.07564	-.03244	.02312	.01948
600.500	400.080	-.08546	-.04296	.03258	.02202
600.570	600.370	-.06059	-.02648	.01102	.00955
600.710	801.090	-.08958	-.02478	.01361	.00933
599.620	1000.100	-.07019	-.02330	.01229	.00993

DATE 02 AUG 75

IA13 SOURCE DATA

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(RTJ369) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 547/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
900.950	1.447	-.06828	-.03123	.02382	.01910
900.820	50.599	-.04538	-.01549	-.00227	.00276
900.720	100.070	-.03538	-.01250	-.00437	.00153
900.650	149.920	-.0328	-.01183	-.00406	.00054
900.580	198.760	-.03384	-.01212	-.00344	.00071
900.440	297.770	-.04760	-.02024	.00565	.00806
900.650	400.060	-.07195	-.03660	.02358	.01646
901.050	502.270	-.08780	-.03288	.02538	.01295
900.760	800.420	-.06749	-.02516	.00926	.01067
899.770	1000.200	-.06907	-.02396	.01172	.00963

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = .000  
 Y = 200.000 PCHMR = 1500.000

## PARAMETRIC DATA

IA13.SRB(S)WITH PLUMES SEPARATING FROM 09T10

(RTJ369) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 549/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
.159	599.910	-.10018	-.03763	.00837	.00815
.286	801.350	-.11479	-.03359	.00928	.00816
-.759	1000.600	-.12015	-.02594	.01077	.00589

RUN NO. 550/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
300.050	600.260	-.12619	-.05193	.00550	.01663
300.570	800.230	-.10176	-.03519	.01010	.00625
300.400	999.380	-.11033	-.02967	.00798	.00698

RUN NO. 551/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
600.300	600.280	-.11503	-.05315	.00445	.01445
600.650	801.260	-.10138	-.03706	.00862	.00757
600.700	998.730	-.11004	-.02983	.00779	.00657

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = .000 PCHMR = 1500.000

## PARAMETRIC DATA

ORIGINAL PAGE IS  
 OF POOR QUALITY

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ369) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 552/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
900.870	600.250	-.09648	-.04699	.00671	.01373
900.750	800.240	-.10079	-.03518	.00522	.00773
900.740	999.150	-.10181	-.03260	.00396	.00815

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 DELTA = .000  
DALPHA = -20.000 DBETA = .000  
Y = .000 PCMBR = 1500.000

## PARAMETRIC DATA

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ370) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 556/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
.370	600.220	-.12221	-.02986	.02508	.00624
.266	799.970	-.11578	-.03077	.01668	.00579
.320	999.460	-.11057	-.02873	.00844	.00697

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 200.000 PCMBR = 1500.000

## PARAMETRIC DATA

RUN NO. 555/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
300.340	600.430	-.10963	-.03331	.01013	.00976
300.380	801.130	-.10851	-.03197	.01346	.00608
300.540	1001.400	-.10795	-.03035	.00985	.00715

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 200.000 PCMBR = 1500.000

RUN NO. 554/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
600.720	600.150	-.09745	-.01763	.00693	.00709
601.020	800.770	-.11083	-.02996	.01116	.00595
600.660	999.140	-.10605	-.03112	.00831	.00737

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 200.000 PCMBR = 1500.000

RUN NO. 553/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
900.430	600.260	-.13822	-.05159	.01391	.02233
900.720	800.890	-.10768	-.03142	.00520	.00939
900.780	999.690	-.10146	-.03247	.00453	.00843

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 200.000 PCMBR = 1500.000

## PARAMETRIC DATA

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ371) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 557/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
.202	600.310	-.10831	-.03369	.02284	.00510
.438	800.860	-.11040	-.03070	.01474	.00656
.282	899.700	-.10671	-.02995	.00556	.00902

RUN NO. 558/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
300.350	600.000	-.10764	-.03312	.01624	.00627
300.400	800.040	-.10954	-.03150	.01329	.00668
300.430	998.950	-.10637	-.03036	.00659	.00803

RUN NO. 559/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
600.540	600.730	-.11288	-.03017	.01748	.00524
600.580	801.130	-.10988	-.03095	.01265	.00689
600.600	999.180	-.10629	-.03145	.00884	.00832

RUN NO. 560/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
800.750	599.500	-.10991	-.03181	.01336	.00706
900.660	799.510	-.11184	-.02907	.01021	.00753
900.670	1000.200	-.10496	-.03271	.00690	.00893

1A13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ372) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 561/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
.819	800.550	-.10374	-.03150	.00190	.00908

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 400.000 PCMMR = 1500.000

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = .000  
Y = 800.000 PCMMR = 1500.000

(RTJ372) ( 31 JUL 75 )  
1A13.SRB(58) WITH PLUMES SEPARATING FROM 09T10

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 582/ 0 RN/L = 1.74

X	Z	CN	CLM	CY	CYN
300.300	799.620	-.10529	-.03078	.00295	.00860

RUN NO. 533/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
800.510	799.870	-.10609	-.03090	.00299	.00813

RUN NO. 564/ 0 RN/L = 1.75

X	Z	CN	CLM	CY	CYN
900.600	800.410	-.10513	-.03217	.00452	.00870

1A13.SRB(58) W/O PLUMES SEPARATING FROM 09T10

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 565/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN
.318	.268	.01549	.00338	-.02175	-.00327
.270	50.152	.01924	.00259	-.02358	-.00340
.277	99.967	.02160	.00244	-.02515	-.00339
.468	149.240	.02200	.00240	-.02483	-.00296
.416	200.000	.02040	.00085	-.02221	-.00074
.209	301.230	.01315	-.00467	-.01720	.00254
.104	401.520	.01431	-.00208	-.01880	-.00035
.223	600.210	.01155	.00542	-.01638	-.00519

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = 5.000  
 Y = .000 PCHMBR = .000

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = .000  
 Y = 800.000 PCHMBR = 500.000

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ373) ( 31 JUL 75 )

1A13 SRB(S8) W/O PLUMES SEPARATING FROM 09T10

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YHRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZHRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 568/ 0 RN/L = 6.57

X	Z	CN	CLM	CY	CYN
900.810	.455	.01499	-.00247	-.03245	.00111
900.750	50.232	.01624	-.00106	-.03045	.00158
900.720	100.250	.01554	-.00012	-.02670	.00118
900.640	150.270	.01491	.00104	-.02336	-.00009
900.700	200.380	.01655	.00141	-.02161	-.00121
900.590	300.850	.01809	.00222	-.02106	-.00259
901.010	397.730	.02246	.00319	-.02292	-.00393
900.650	600.330	.01559	-.00222	-.02450	-.00196

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = 5.000  
 Y = .000 PCHMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YHRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZHRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 568/ 3 RN/L = 6.59

X	Z	CN	CLM	CY	CYN
.152	-1.195	.02319	.00415	-.01993	.00334
.219	50.470	.02187	.00312	-.01978	.00349
.289	100.470	.02011	.00226	-.01895	.00311
.271	150.380	.01841	.00158	-.01775	.00238
.228	200.380	.01660	.00119	-.01636	.00122
.342	300.280	.01292	.00203	-.01375	-.00201
.372	399.600	.01145	.00439	-.01358	-.00461
.498	599.110	.01640	.00508	-.01845	-.00596

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = 5.000  
 Y = 200.000 PCHMR = .000

(RTJ374) ( 31 JUL 75 )

1A13 SRB(S8) W/O PLUMES SEPARATING FROM 09T10

DATE 02 AUG 75

1A13 SOURCE DATA

(RTJ374) ( 31 JUL 75 )

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 08T10

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 569/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN
900.690	-.943	.01406	.00227	-.01924	-.00281
900.820	48.740	.01410	.00340	-.01950	-.00381
900.700	99.704	.01497	.00414	-.02023	-.00476
900.710	149.790	.01678	.00427	-.02143	-.00511
900.820	199.830	.01974	.00374	-.02362	-.00465
900.750	299.630	.02380	.00291	-.02557	-.00345
900.690	400.480	.02273	.00147	-.02478	-.00211
900.510	601.830	.01248	-.00029	-.01674	-.00124

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ375) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 567/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN
.183	.011	.01968	.00272	-.01391	-.00592
.273	50.035	.01840	.00329	-.01354	-.00620
.210	99.995	.01722	.00382	-.01360	-.00652
.131	149.970	.01637	.00428	-.01399	-.00677
.157	200.140	.01581	.00466	-.01457	-.00685
.154	300.110	.01620	.00499	-.01667	-.00651
.252	399.920	.01771	.00458	-.01907	-.00586
.319	599.920	.02094	.00278	-.02345	-.00362

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = 5.000  
 Y = 200.000 PCMBR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = 5.000  
 Y = 400.000 PCMBR = .000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ375) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 570/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN
900.730	-.092	.02333	.00575	-.01309	.00056
900.710	49.655	.02372	.00470	-.01404	.00084
900.680	99.467	.02354	.00341	-.01564	.00183
900.830	149.610	.02244	.00217	-.01676	.00327
900.800	199.300	.02075	.00140	-.01640	.00388
900.700	299.800	.01673	.00103	-.01550	.00250
900.770	400.470	.01409	.00164	-.01500	-.00089
901.040	598.720	.01305	.00444	-.01564	-.00523

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = 5.000  
 Y = 400.000 PCMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 575/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
.256	-.279	.02265	.00480	.03646	.01151
.380	49.653	.02244	.00385	.03690	.01327
.293	99.618	.02020	.00390	.03725	.01138
.338	149.530	.01930	.00355	.03734	.00994
.452	199.880	.01797	.00243	.03785	.00898
.401	300.110	.02401	-.00062	.03116	.00860
.518	399.820	.02642	-.00185	.03022	.00823
.289	600.180	.01523	.00413	.03094	-.00041

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -5.000  
 Y = 200.000 PCMR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ376) ( 31 JUL 75 )



IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ376) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 571/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
900.690	.059	.02080	-.00027	.01029	.00889
900.740	50.165	.01951	.00074	.00991	.00819
900.500	100.070	.01871	.00155	.01099	.00752
900.730	150.070	.01841	.00198	.01390	.00645
900.640	200.140	.01827	.00237	.01730	.00518
900.620	299.780	.01708	.00362	.02340	.00375
900.720	399.290	.01595	.00360	.02799	.00558
900.620	600.180	.02150	-.00208	.02760	.00816

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ377) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 578/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
.369	.102	.02632	.00218	.03346	.00568
.233	50.165	.02671	.00134	.03175	.00622
.346	100.170	.02679	.00074	.03128	.00605
.314	150.110	.02639	.00026	.03081	.00579
.155	200.170	.02579	.00007	.03067	.00511
.258	300.110	.02394	.00025	.03208	.00267
.123	400.120	.02061	.00154	.03377	-.00038
.209	599.680	.01384	.00612	.02778	.00032

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = -5.000  
Y = 200.000 PCMSR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = -5.000  
Y = 400.000 PCMSR = .000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ377) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 50.FT. XRRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 572/ 0 RN/L = 6.50

X	Z	CN	CLM	CY	CYN
900.510	.162	.01878	.00462	.03394	.01079
900.570	50.201	.01611	.00541	.03465	.00992
900.660	99.986	.01485	.00513	.03364	.01017
900.630	149.970	.01606	.00574	.03234	.01084
900.610	200.010	.01906	.00388	.03321	.01128
900.570	300.420	.01869	.00322	.03337	.01155
900.580	399.570	.02451	.00053	.02762	.00952
900.560	600.140	.02438	-.00061	.02763	.00455

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -5.000  
 Y = 400.000 PCHMR = .000

## REFERENCE DATA

SREF = 2690.0000 50.FT. XRRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 574/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN
.307	399.940	.01508	-.00211	.03003	.00860
.139	600.230	.01830	.00105	.02854	.00137

RUN NO. 573/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN
900.600	398.040	.02102	.00232	.02028	.00269
900.670	600.090	.01427	-.00108	.02890	.00657

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -5.000  
 Y = .000 PCHMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBT10

(RTJ378) ( 31 JUL 75 )

(RTJ379) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XRRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YRRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. ZS  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = -10.000  
Y = 400.000 PCHMBR = .000

RUN NO. 577/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.302	-.178	.02569	.00348	.07137	.00807
.258	49.870	.02595	.00278	.07111	.00797
.415	99.807	.02611	.00202	.07059	.00764
.326	149.880	.02613	.00143	.06977	.00735
.476	199.860	.02642	.00084	.06935	.00691
.492	299.840	.02783	-.00040	.06882	.00548
.594	400.090	.02602	-.00005	.07069	.00215
.693	600.130	.01908	.00461	.06861	-.00177

RUN NO. 582/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.520	.135	.02384	.00329	.05899	.01738
900.720	50.113	.02227	.00349	.05959	.01665
900.840	100.150	.02074	.00392	.06099	.01632
900.720	149.850	.02178	.00365	.06309	.01595
900.890	200.020	.02211	.00283	.06635	.01501
900.650	300.340	.02290	.00134	.06914	.01416
900.380	400.030	.02315	.00071	.06759	.01129
900.450	599.950	.02530	-.00067	.06498	.00602

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XRRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YRRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. ZS  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = 5.000 DBETA = -10.000  
Y = 200.000 PCHMBR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ380) ( 31 JUL 75 )

RUN NO. 578/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.485	199.930	.01486	.00234	.07724	.01120
.546	300.750	.01620	.00139	.07440	.00852
.214	399.970	.02595	-.00139	.06756	.00794
.070	600.100	.02318	.00117	.06848	-.00049

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBTIO

(RTJ380) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 581/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.670	.430	.02449	-.00188	.04005	.00824
900.640	50.010	.02583	-.00102	.04010	.00719
900.670	100.100	.02355	.00061	.04010	.00742
900.630	150.010	.02430	.00089	.04032	.00843
900.480	193.910	.02542	.00047	.04262	.00842
900.510	299.610	.02323	.00160	.05201	.00678
900.600	399.950	.01945	.00270	.06039	.00830
900.490	600.210	.02148	-.00217	.06550	.00992

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -10.000  
 Y = 200.000 PCHEER = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 579/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.190	399.820	.01880	-.00181	.06863	.01021
.059	600.190	.02507	-.00055	.06721	.00082

RUN NO. 580/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.700	399.850	.02320	.00208	.05319	.00336
900.520	600.050	.01212	-.00111	.06888	.00874

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -10.000  
 Y = .000 PCHEER = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OBTIO

(RTJ381) (31 JUL 75)

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ382) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 587/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN
.354	399.940	.02318	-.00237	.16968	.00758
.520	599.880	.01991	.00353	.16693	-.00293

RUN NO. 583/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN
500.370	.803	.02469	-.00155	.08751	.01290
900.260	50.596	.03116	-.00186	.09710	.00854
900.230	100.070	.03589	-.00212	.10551	.00668
900.210	149.960	.03611	-.00153	.11608	.00451
899.830	199.960	.03588	-.00131	.12435	.00350
899.600	299.730	.03425	-.00025	.13615	.00450
900.770	399.940	.03049	.00079	.15009	.00747
899.250	600.420	.02252	-.00560	.16972	.01060

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -20.000  
 Y = 200.000 PCHMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 588/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN
.538	299.840	.02805	-.00045	.16381	.00874
.039	399.960	.02678	-.00031	.16685	.00443
-.610	600.230	.02303	.00331	.16857	-.00538

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -20.000  
 Y = 400.000 PCHMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ383) ( 31 JUL 75 )

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ383) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 584/ 0 RN/L = 6.61

X	Z	CM	CLM	CY	CYN
900.120	.135	.03271	-.00054	.12162	.02424
900.730	49.707	.03433	-.00048	.12719	.02175
900.720	99.835	.03460	-.00031	.13220	.02050
900.730	150.030	.03419	-.00052	.13851	.01990
900.820	200.000	.03363	-.00088	.14224	.02007
901.050	300.570	.03145	-.00234	.15573	.01783
900.600	400.470	.02632	-.00207	.16441	.01343
900.000	599.790	.02610	-.00169	.16363	.00643

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -20.000  
 Y = 400.000 PCHMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 586/ 0 RN/L = 6.60

X	Z	CM	CLM	CY	CYN
.019	399.790	.01108	-.00500	.17715	.00788
-.684	600.100	.02134	.00326	.16025	-.00154

RUN NO. 585/ 0 RN/L = 6.60

X	Z	CM	CLM	CY	CYN
900.810	399.900	.03010	.00154	.14113	.00032
899.180	600.380	.02311	-.00519	.16934	.01036

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = 5.000 DBETA = -20.000  
 Y = .000 PCHMR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ384) ( 31 JUL 75 )

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ385) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 599/ 0 RN/L = 6.83

X	Z	CN	CLM	CY	CYN
.237	50.044	-.03748	-.00118	-.02345	-.00101
.224	99.533	-.04161	.00140	-.02259	-.00129
.162	148.650	-.04413	.00126	-.02023	-.00132
.240	200.230	-.04397	-.00325	-.01525	-.00026
.254	300.010	-.04250	-.01303	-.02057	.00274
.203	402.050	-.04189	-.00964	-.02063	-.00177
.437	601.120	-.03519	-.00629	-.03102	.00046
.354	800.420	-.04076	.00142	-.02655	-.00143
.222	1000.000	-.03022	-.00220	-.02346	-.00361

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = 5.000  
Y = .000 PCMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 590/ 0 RN/L = 6.83

X	Z	CN	CLM	CY	CYN
.216	50.362	-.03279	-.00382	-.01233	-.00082
.428	100.460	-.03388	-.00488	-.01548	-.00007
.234	150.250	-.03265	-.00636	-.02042	.00172
.375	200.117	-.03292	-.00686	-.02367	.00261
.386	300.150	-.03394	-.00556	-.02978	.00289
.254	399.600	-.03405	-.00522	-.03003	.00184
.266	599.190	-.03743	.00010	-.02558	-.00119
.389	799.550	-.03509	.00055	-.02083	-.00511
.355	1000.000	-.02771	-.00373	-.02497	-.00269

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = 5.000  
Y = 200.000 PCMR = .000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORBIT

(RTJ387) (31 JUL 75)

## REFERENCE DATA

SRF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LRF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BRF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 591/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
.013	49.982	-.03704	-.00130	-.02368	-.00104
.255	99.591	-.04125	.00142	-.02291	-.00130
.233	148.760	-.04379	.00144	-.02048	-.00137
.354	203.210	-.04368	-.00277	-.01587	-.00052
.253	300.000	-.04234	-.01302	-.02041	.00271
.210	402.150	-.04153	-.00975	-.02091	-.00178
.502	601.120	-.03507	-.00638	-.03123	.00042
.396	800.510	-.04062	.00136	-.02650	-.00140
.235	1000.100	-.03035	-.00205	-.02329	-.00365

RUN NO. 594/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
900.650	.650	-.03876	-.00610	-.02294	-.00077
900.620	50.322	-.03586	-.00459	-.02574	-.00033
900.590	100.310	-.03353	-.00451	-.02732	-.00015
900.680	150.460	-.03093	-.00476	-.02798	-.00040
900.650	200.600	-.02781	-.00473	-.02763	-.00057
900.670	300.180	-.02706	-.00284	-.02903	-.00017
900.690	400.190	-.02966	-.00099	-.02739	-.00086
900.680	601.170	-.04065	-.00900	-.02015	-.00353
900.770	801.210	-.03402	-.00816	-.02821	-.00176
900.650	999.910	-.03607	-.00184	-.02797	-.00109

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 CALPHA = -5.000 DBETA = 5.000  
 Y = .000 PCMBR = .000

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IA13 SP8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ388) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2650.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 592/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.142	50.339	-.03262	-.00380	-.01208	-.00082
.292	100.530	-.03391	-.00462	-.01521	-.00012
.285	150.350	-.03265	-.00638	-.02022	.00159
.400	200.260	-.03282	-.00691	-.02333	.00255
.429	300.220	-.03374	-.00666	-.02976	.00292
.284	399.740	-.03376	-.00531	-.03018	.00183
.232	599.130	-.03718	-.00001	-.02575	-.00114
.353	799.490	-.03527	.00083	-.02089	-.00513
.301	999.880	-.02754	-.00371	-.02520	-.00274

RUN NO. 595/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.580	-.909	-.02893	-.00685	-.02790	.00023
900.570	49.837	-.02802	-.00583	-.02831	-.00030
900.570	99.920	-.02808	-.00518	-.02818	-.00071
900.700	149.960	-.02691	-.00420	-.02732	-.00112
900.840	200.060	-.03071	-.00315	-.02469	-.00211
900.700	300.330	-.03736	-.00055	-.02127	-.00374
900.740	400.960	-.04035	-.00252	-.01876	-.00408
900.770	601.240	-.03563	-.00993	-.02751	.00023
900.550	798.400	-.03339	-.00479	-.02912	-.00027
900.600	999.130	-.03697	.00069	-.02495	-.00248

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = 5.000  
Y = 200.000 PCMRB = .000

DATE 02 AUG 76

IA13 SOURCE DATA

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IA13 848 (88) W/O PLUMES SEPARATING FROM ORT10

(RTJ388) (31 JUL 75)

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 593/ 0 RN/L = 6.65

X	Z	CN	CLM	CY	CYN
.219	.030	-.0212	-.00486	-.01704	-.00500
.164	50.061	-.02312	-.00411	-.01756	-.00461
.219	99.975	-.02503	-.00348	-.01827	-.00429
.273	149.950	-.02680	-.00296	-.01897	-.00406
.210	199.890	-.02822	-.00246	-.01899	-.00396
.250	300.000	-.03041	-.00158	-.01883	-.00453
.127	400.110	-.03112	-.00118	-.01787	-.00559
.173	599.810	-.02838	-.00245	-.02049	-.00558
.252	799.930	-.02743	-.00362	-.02584	-.00270
.272	1000.100	-.02765	-.00365	-.02534	-.00276

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = 5.000  
 Y = 400.000 PCHEER = .000

RUN NO. 595/ 0 RN/L = 6.65

X	Z	CN	CLM	CY	CYN
900.570	-.276	-.03181	-.00373	-.00976	.00061
900.560	49.770	-.03356	-.00416	-.00987	.00021
900.720	99.793	-.03454	-.00483	-.01051	-.00012
900.590	149.880	-.03511	-.00562	-.01098	-.00013
900.500	200.090	-.03486	-.00657	-.01225	.00030
900.440	300.270	-.03228	-.00796	-.02003	.00175
900.620	400.510	-.03158	-.00753	-.02792	.00145
900.670	600.670	-.03382	-.00417	-.02993	.00071
900.670	800.280	-.03599	-.00006	-.02399	-.00222
900.580	999.670	-.03086	-.00156	-.02263	-.00432

IA13 SR8(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ380) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1137.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -5.000  
Y = .000 PCHEER = .000

RUN NO. 597/ 0 RN/L = 6.65

X	Z	CN	CLM	CY	CYN
.491	402.460	-.03385	-.01466	.02740	.01106
.421	600.950	-.03517	-.00758	.03135	.00428
.360	800.730	-.03710	-.00248	.02965	.00180
.450	999.970	-.03779	.00157	.02525	.00201

RUN NO. 598/ 0 RN/L = 6.65

X	Z	CN	CLM	CY	CYN
300.330	399.110	-.02539	-.01709	.02290	.01226
300.250	598.860	-.03609	-.00901	.02825	.00615
300.310	798.650	-.03391	-.00534	.02907	.00260
300.390	998.840	-.03668	.00045	.02779	.00128

RUN NO. 599/ 0 RN/L = 6.65

X	Z	CN	CLM	CY	CYN
600.560	400.170	-.01783	-.00790	.01705	.00608
600.910	601.700	-.03524	-.01359	.03013	.00783
600.770	801.060	-.03430	-.00713	.02865	.00389
600.770	1000.300	-.03574	-.00177	.02856	.00177

RUN NO. 600/ 0 RN/L = 6.65

X	Z	CN	CLM	CY	CYN
900.500	399.210	-.01993	-.00385	.01860	.00304
900.650	599.710	-.02954	-.01257	.02306	.00830
900.570	799.580	-.03528	-.00796	.02694	.00512
900.610	900.740	-.03365	-.00401	.02863	.00218

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM C9T10

(RTJ391) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. X5  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y5  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z5  
 SCALE = .0100

RUN NO. 601/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.324	49.933	-.04282	-.00314	.05178	.00892
.252	99.704	-.04514	-.00209	.04613	.00973
.220	150.170	-.04748	-.00210	.03741	.01150
.344	200.110	-.04062	-.00547	.03511	.01144
.385	300.260	-.03653	-.00652	.04004	.00638
.380	400.540	-.03478	-.00705	.03431	.00627
.428	500.690	-.03408	-.00518	.03127	.00369
.419	600.510	-.03717	-.00072	.03103	.00057
.345	999.980	-.03330	-.00040	.02625	.00153

RUN NO. 602/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.230	50.020	-.03175	-.00881	.03856	.01244
300.310	100.410	-.03537	-.00791	.03503	.01368
300.290	150.290	-.03927	-.00685	.03173	.01543
300.350	200.450	-.03992	-.00914	.02923	.01713
300.440	300.270	-.03506	-.01097	.03410	.01422
300.080	399.300	-.03365	-.00916	.03076	.00926
300.280	599.290	-.03322	-.00682	.03168	.00467
300.240	799.280	-.03529	-.00300	.02994	.00201
300.310	999.100	-.03579	.00107	.02920	.00027

RUN NO. 605/ 0 RN/L = 8.82

X	Z	CN	CLM	CY	CYN
800.570	.182	-.02889	-.00740	.02310	.00899
600.680	50.417	-.02828	-.00710	.02182	.00815
600.560	99.992	-.02568	-.00741	.01990	.00822
600.630	150.000	-.02465	-.00752	.01901	.00870
600.440	199.290	-.02549	-.00713	.01773	.00931
600.350	298.410	-.02795	-.00872	.02118	.01175
600.600	400.850	-.03316	-.01235	.02854	.01361
600.790	600.810	-.03551	-.00771	.03107	.00608
600.800	800.820	-.03396	-.00536	.02915	.00346
600.650	1000.000	-.03538	-.00087	.02928	.00107

## PARAMETRIC DATA

MACH = 4.530 PTOAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -5.000  
 Y = 200.000 PCIMBR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

(RTJ391) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 606/ 0 RN/L = 6.82

X	Z	CN	CLM	CY	CYN
900.600	-.008	-.03045	-.00812	.02020	.00731
900.470	49.780	-.02600	-.00690	.01607	.00813
900.500	99.934	-.02375	-.00758	.01329	.00859
900.680	149.600	-.02195	-.00791	.01243	.00815
900.550	199.830	-.02104	-.00769	.01258	.00770
900.680	299.910	-.02253	-.00643	.01470	.00787
900.830	400.750	-.02567	-.00787	.01937	.00942
901.080	602.070	-.03489	-.01100	.03183	.00838
900.510	798.640	-.03258	-.00684	.02827	.00448
900.680	999.020	-.03424	-.00259	.02924	.00176

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -5.000  
Y = 200.000 PCMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 603/ 0 RN/L = 6.82

X	Z	CN	CLM	CY	CYN
.325	-.075	-.03575	-.00109	.04781	-.00029
.375	48.888	-.03934	.00038	.04907	-.00140
.321	100.020	-.04049	.00082	.04549	-.00005
.241	149.970	-.03766	-.00084	.04058	.00209
.380	199.950	-.03418	-.00317	.03762	.00322
.374	300.020	-.03253	-.00421	.03331	.00438
.449	400.330	-.03308	-.00385	.03166	.00384
.455	500.390	-.03410	-.00183	.03320	.00065
.381	800.020	-.03643	.00078	.03314	-.00174
.286	999.980	-.02581	-.00455	.02280	.00308

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -5.000  
Y = 400.000 PCMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

(RTJ392) ( 31 JUL 75 )

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(58) W/O PLUMES SEPARATING FROM ORT10

(RTJ382) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -5.000  
 Y = 400.000 PCMRP = .000

RUN NO. 604/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.490	.481	-.03171	-.00493	.04259	.00660
300.300	50.232	-.03315	-.00471	.04225	.00583
300.350	100.140	-.03540	-.00377	.04259	.00467
300.220	150.010	-.03806	-.00236	.04182	.00418
300.350	200.040	-.03852	-.00216	.03988	.00420
300.320	300.140	-.03409	-.00480	.03512	.00510
300.270	399.840	-.03276	-.00506	.03236	.00485
300.190	599.670	-.03349	-.00357	.03078	.00283
300.330	799.500	-.03506	-.00090	.03134	-.00010
300.290	999.480	-.03142	-.00120	.02739	.00088

RUN NO. 608/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.480	.252	-.03053	-.00655	.04058	.01247
600.560	50.365	-.03134	-.00710	.03889	.01230
600.450	100.320	-.03169	-.00766	.03752	.01174
600.420	150.130	-.03390	-.00716	.03575	.01070
600.460	200.000	-.03632	-.00569	.03544	.00882
600.420	299.750	-.03535	-.00435	.03725	.00596
600.550	399.950	-.03323	-.00593	.03455	.00575
600.470	599.700	-.03241	-.00544	.03066	.00426
600.400	799.400	-.03430	-.00248	.02972	.00152
600.430	999.370	-.03500	.00026	.03039	-.00044

RUN NO. 607/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.610	-.329	-.02630	-.00783	.03640	.01202
900.570	49.794	-.02770	-.00820	.03665	.01158
900.580	99.672	-.02882	-.00876	.03569	.01131
900.610	149.740	-.03054	-.00932	.03401	.01171
900.640	199.850	-.03190	-.00970	.03325	.01203
900.750	300.280	-.03601	-.00802	.03488	.01180
900.780	400.560	-.03848	-.00591	.03366	.00860
900.890	600.500	-.03336	-.00644	.03168	.00522
900.830	800.580	-.03352	-.00420	.02976	.00311
900.640	999.540	-.03443	-.00114	.02992	.00062

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IA13 SR8(S8) W/O PLUMES SEPARATING FROM 09T10

(RTJ393) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 609/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.240	800.040	-.02583	-.00450	.02228	.00309

RUN NO. 610/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.330	799.880	-.02581	-.00443	.02229	.00304

RUN NO. 611/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.540	799.860	-.02685	-.00382	.02357	.00211

RUN NO. 612/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.720	799.950	-.03107	-.00178	.03037	-.00146

IA13 SR8(S8) W/O PLUMES SEPARATING FROM 09T10

(RTJ394) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 613/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
-.005	799.860	-.02998	-.00378	.05648	.00378

RUN NO. 614/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.420	799.870	-.03184	-.00259	.05904	.00247

RUN NO. 615/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.590	799.930	-.03987	-.00096	.06830	-.00246

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -5.000  
Y = 800.000 PCMR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -10.000  
Y = 800.000 PCMR = .000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ394) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0700 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 616/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.630	800.120	-.03783	-.00004	.06894	-.00226

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -10.000  
 Y = 800.000 PCMBR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ395) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 620/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.202	50.061	-.04348	.00026	.08236	.00401
.259	99.971	-.04479	.00125	.07821	.00590
.231	149.870	-.04169	-.00060	.07568	.00628
.291	199.850	-.03882	-.00240	.07306	.00698
.306	300.060	-.03705	-.00396	.07098	.00638
.359	400.220	-.03698	-.00410	.06963	.00548
.449	600.480	-.03712	-.00309	.06802	.00325
.438	800.310	-.04154	.00112	.07033	-.00165
.055	1000.000	-.03346	-.00201	.05929	.00329

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -10.000  
 Y = 400.000 PCMBR = .000

RUN NO. 617/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.410	.000	-.03581	-.00540	.08019	.01107
300.480	50.160	-.03663	-.00476	.07908	.00991
300.360	99.928	-.03817	-.00361	.07642	.00977
300.460	150.000	-.03958	-.00344	.07450	.00959
300.530	199.940	-.03965	-.00306	.07225	.00952
300.520	299.920	-.03804	-.00429	.06959	.00856
300.630	400.080	-.03777	-.00455	.06951	.00697
300.690	600.410	-.03704	-.00429	.06704	.00464
300.670	800.530	-.03975	-.00116	.06752	.00288
300.240	1000.000	-.03931	.00136	.06553	-.00041



1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10 (RTJ395) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -10.000  
 Y = 400.000 PCMRB = .000

## PARAMETRIC DATA

RUN NO. 618/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.650	.325	-.03479	-.00698	.07423	.01883
600.330	50.153	-.03353	-.00777	.07079	.01844
600.460	100.230	-.03345	-.00818	.07049	.01712
600.350	150.170	-.03526	-.00745	.06892	.01580
600.390	200.020	-.03754	-.00626	.06766	.01446
600.370	259.980	-.03869	-.00518	.06673	.01203
600.420	399.970	-.03663	-.00577	.06850	.00935
600.270	599.840	-.03726	-.00496	.06688	.00582
600.280	799.530	-.03786	-.00318	.06499	.00311
600.350	999.190	-.03993	.00074	.06768	-.00066

RUN NO. 619/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.650	-.195	-.02888	-.00843	.08127	.02012
900.560	49.844	-.02964	-.00890	.05956	.01950
900.530	99.776	-.03128	-.00917	.05851	.01991
900.590	149.840	-.03254	-.00953	.05876	.01961
900.500	199.930	-.03378	-.00952	.06007	.01399
900.660	300.150	-.03686	-.00849	.06316	.01782
900.940	400.500	-.03780	-.00744	.06494	.01418
900.870	600.270	-.03748	-.00577	.06819	.00696
900.830	800.480	-.03733	-.00457	.06449	.00491
900.750	1000.200	-.03944	-.00098	.06737	.00088

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ396) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BRFF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -10.000  
 Y = 200.000 PCMRBR = .000

RUN NO. 621/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.321	300.430	-.03555	-.00997	.05991	.01777
.483	400.600	-.04002	-.00642	.06854	.00941
.511	600.690	-.03843	-.00517	.06741	.00546
.499	800.650	-.04145	-.00084	.06782	.00101
.123	1000.000	-.04051	.00153	.06206	.00148

RUN NO. 622/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.410	50.002	-.02370	-.00728	.06035	.02232
300.370	100.060	-.03536	-.00914	.05506	.02356
300.330	149.830	-.03469	-.00918	.05334	.02370
300.210	199.190	-.03533	-.00994	.05179	.02514
300.590	300.700	-.03272	-.01304	.05531	.02328
300.520	400.630	-.03654	-.01002	.06083	.01480
300.670	500.600	-.03881	-.00629	.06719	.00680
300.650	600.840	-.03920	-.00157	.06591	.00327
300.310	999.980	-.04207	.00189	.06664	-.00021

RUN NO. 623/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.470	100.470	-.02532	-.00825	.03603	.01537
600.440	150.40	-.02404	-.00364	.03508	.01553
600.200	199.340	-.02374	-.01870	.03647	.01573
599.950	298.860	-.02702	-.00979	.04397	.01773
600.470	400.030	-.02816	-.01409	.05580	.01930
600.760	500.680	-.04083	-.00707	.06543	.00873
600.810	600.830	-.03829	-.00526	.06449	.00498
600.470	1000.000	.04031	-.00041	.06680	.00084

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ396) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 624/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.250	99.930	-.02781	-.00605	.03915	.00875
900.550	149.780	-.02504	-.00625	.04007	.00764
900.310	199.710	-.02166	-.00710	.04114	.00715
900.820	300.000	-.02177	-.00718	.04436	.00864
900.990	400.850	-.02679	-.00790	.04989	.01174
901.130	602.420	-.04008	-.01044	.06368	.01212
900.180	798.560	-.03844	-.00578	.06363	.00604
900.450	999.090	-.03835	-.00267	.06590	.00227

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -10.000  
 Y = 200.000 PCMBR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ397) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 625/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.559	403.020	-.04042	-.01399	.06264	.01328
.594	601.020	-.04069	-.00682	.03533	.00651
.445	800.850	-.04122	-.00214	.06820	.00162
.129	999.890	-.04157	.00193	.06010	.00297

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -10.000  
 Y = .000 PCMBR = .000

RUN NO. 626/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.090	398.350	-.02866	-.01582	.05502	.01522
300.320	599.250	-.04459	-.00720	.06382	.00926
300.060	796.400	-.03771	-.00521	.06510	.00345
300.200	998.730	-.04180	.00141	.06478	.00073

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ397) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 627/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
800.550	400.160	-.02012	-.00752	.04595	.00863
601.000	601.630	-.04020	-.01252	.06529	.01047
600.700	801.070	-.03945	-.00630	.06383	.00548
600.620	1000.200	-.04034	-.00112	.06612	.00143

RUN NO. 628/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.440	399.020	-.01913	-.00443	.04719	.00460
900.480	599.660	-.03583	-.01111	.05843	.01061
900.510	799.640	-.04362	-.00609	.06245	.00685
900.450	998.500	-.03742	-.00381	.06601	.00252

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ398) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 629/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.000	.000	-.05084	-.01250	.15788	.01370
.188	599.800	-.05394	-.00564	.16539	.00469
.756	800.820	-.05668	.00305	.16424	-.00208
-.659	999.850	-.04178	-.00101	.15155	.00168

RUN NO. 630/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.380	399.950	-.03998	-.00930	.15088	.01284
300.680	600.220	-.05131	-.00923	.16362	.00804
299.350	798.200	-.05584	.00001	.16414	-.00043
299.740	998.190	-.04952	.00320	.15812	-.00155

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -10.000  
Y = .000 PCHMBR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -20.000  
Y = .000 PCHMBR = .000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM O9T10

(RTJ398) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BRPF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 637/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.820	400.170	-.02913	-.00364	.13892	.00407
600.140	599.810	-.05253	-.01165	.16233	.01105
601.210	801.740	-.05339	-.00456	.16485	.00309
599.460	999.770	-.05225	.00252	.16320	-.00262

RUN NO. 638/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.820	400.080	-.02923	-.00148	.14019	-.00089
900.420	598.890	-.04525	-.00677	.15744	.01016
901.230	801.610	-.05099	-.00781	.16379	.00590
899.410	999.790	-.05347	.00072	.16581	-.00138

1A13 SRB(SB) W/C PLUMES SEPARATING FROM O9T10

(RTJ399) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BRPF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 632/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.103	401.250	-.04427	-.00980	.15044	.01569
-.073	598.120	-.04742	-.00519	.16095	.00683
-.362	799.020	-.05368	.00146	.16618	-.00270
-.251	998.920	-.04863	.00263	.15556	-.00052

RUN NO. 631/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.290	400.160	-.03425	-.01385	.14635	.01940
300.670	600.460	-.04713	-.00686	.16167	.00877
300.810	801.120	-.05182	-.00202	.16578	.00099
300.380	1000.100	-.05199	.00361	.16508	-.00460

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -20.000  
 Y = .000 PCMR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -20.000  
 Y = 200.000 PCMR = .000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ399) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 636/ 0 RN/L = 6.62

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -20.000  
 Y = 200.000 PCHMR = .000

X	Z	CN	CLM	CY	CYN
600.660	300.040	-.01804	-.01290	.11784	.01944
599.940	398.770	-.02862	-.01294	.14226	.01839
600.910	600.480	-.04693	-.00310	.16175	.01019
601.120	801.100	-.04914	-.00458	.16270	.00446
599.530	999.870	-.05191	.00185	.16691	-.00356

RUN NO. 639/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.550	100.740	-.02641	-.00569	.07181	.01864
900.210	150.550	-.01944	-.00653	.07133	.01900
899.590	199.710	-.00918	-.01000	.08471	.01488
899.070	298.890	-.01592	-.00739	.10929	.01048
900.800	400.150	-.02277	-.00829	.13231	.01105
901.080	600.840	-.04575	-.01091	.16055	.01236
901.080	800.880	-.04829	-.00599	.16199	.00608
899.510	999.870	-.05066	-.00062	.16670	-.00108

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 633/ 0 RN/L = 6.62

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -5.000 DBETA = -20.000  
 Y = 400.000 PCHMR = .000

X	Z	CN	CLM	CY	CYN
.250	400.210	-.04319	-.00572	.15462	.01211
.702	600.380	-.04627	-.00349	.16381	.00489
.792	800.650	-.05207	.00135	.16056	-.00395
-.565	999.930	-.04905	.00277	.15744	-.00211

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1A13 SRB(58) W/O PLUMES SEPARATING FROM ORBIT

(RTJ400) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2880.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -5.000 DBETA = -20.000  
Y = 400.000 PCHMR = .000

RUN NO. 634/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.700	50.373	-.04747	-.00408	.13307	.03430
300.510	99.990	-.04150	-.00573	.12366	.03582
300.420	149.810	-.03791	-.00741	.11860	.03618
300.230	199.790	-.03505	-.00885	.11645	.03527
300.000	299.980	-.03041	-.01192	.12645	.02854
300.270	399.880	-.03386	-.01050	.14422	.01903
300.630	600.240	-.04590	-.00455	.16261	.00652
300.840	800.900	-.04930	-.00163	.16554	-.00003
299.540	999.900	-.05172	.00365	.16740	-.00619

RUN NO. 635/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
999.930	50.289	-.03998	-.00774	.11844	.03889
800.100	100.120	-.03728	-.00908	.11198	.03877
600.280	150.120	-.03377	-.01068	.11311	.03630
600.250	199.770	-.03032	-.01172	.11802	.03260
600.420	299.990	-.03119	-.01121	.13037	.02594
600.530	400.060	-.03233	-.01113	.13967	.02200
600.360	600.250	-.04428	-.00575	.15935	.00849
600.040	799.660	-.04658	-.00356	.16080	.00338
600.090	999.040	-.05019	.00178	.16725	-.00468

RUN NO. 640/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
999.980	99.872	-.03706	-.00789	.11054	.03105
900.630	150.040	-.03170	-.01071	.11242	.03024
900.780	199.790	-.02968	-.01079	.11982	.02701
901.070	300.220	-.03014	-.01135	.13378	.02380
900.950	400.350	-.03457	-.01067	.14474	.02042
900.510	600.270	-.04201	-.00787	.15700	.01116
900.220	799.440	-.04604	-.00426	.16049	.00483
900.320	999.260	-.04853	-.00055	.16627	-.00196

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJA01) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 641/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
-1.508	799.980	-0.4930	.00302	.16980	-.00870

RUN NO. 642/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.570	800.010	-0.4934	.00238	.17224	-.00863

RUN NO. 643/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
800.600	800.180	-0.4781	.00052	.16818	-.00523

RUN NO. 644/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.740	800.100	-0.4540	-.00130	.16375	-.00166

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJA02) (31 JUL 75)

## REFERENCE DATA

BREF = 2690.0000 SQ. FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 645/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.173	200.280	-.08552	-.00443	-.01838	.00106
.159	300.730	-.08780	-.01181	-.01787	.00203
.449	402.800	-.08662	-.00968	-.01830	-.00100
.424	601.300	-.07412	-.00796	-.03056	-.00042
.426	801.210	-.07570	-.00213	-.03202	-.00007
.153	1000.100	-.07801	.00397	-.03013	-.00134

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = 5.000  
 Y = .000 PCMBR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = 5.000  
 Y = .000 PCMBR = .000



REFERENCE DATA

SREF = 2000.0000 SQ.FT. XPRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 648/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.690	.959	-.06893	-.02214		.00099
900.570	50.450	-.08113	-.02371		.00049
900.580	100.170	-.06053	-.00710	-.02699	.00080
900.590	150.510	-.05889	-.00744	-.02819	.00000
900.650	200.760	-.05699	-.00747	-.02936	-.00032
900.570	300.120	-.05320	-.00700	-.03115	-.00051
900.700	400.180	-.05729	-.00437	-.03242	-.00014
900.660	600.480	-.07372	-.01135	-.02743	-.00169
900.640	801.520	-.07608	-.00839	-.02763	-.00234
900.590	1000.100	-.07148	-.00507	-.03253	-.00051

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = 9.000  
Y = .000 PCHEER = .000

REFERENCE DATA

SREF = 2000.0000 SQ.FT. XPRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 648/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.277	200.250	-.07479	-.00844	-.01848	-.00106
.354	300.170	-.07143	-.00839	-.02788	.00208
.223	399.830	-.07193	-.00700	-.03163	.00205
.081	599.020	-.07409	-.00182	-.03185	.00082
.114	799.460	-.07853	.00244	-.02898	-.00188
.315	999.800	-.08414	-.00327	-.02826	-.00270

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = 5.000  
Y = 200.000 PCHEER = .000

DATE 02 JUL 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM ORTIO

(RTJ03) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 648/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.800	.274	-.06615	-.00839	-.02579	.00051
900.410	49.788	-.06478	-.00682	-.02648	-.00002
900.490	100.130	-.06454	-.00613	-.02636	-.00060
900.530	150.190	-.06523	-.00548	-.02778	-.00128
900.560	200.210	-.06547	-.00531	-.02633	-.00199
900.530	300.310	-.06735	-.00522	-.02510	-.00251
900.680	401.040	-.07508	-.00517	-.02533	-.00208
900.950	601.760	-.07771	-.01094	-.02649	-.00008
900.430	798.260	-.07149	-.00672	-.03058	-.00047
900.390	998.960	-.07330	-.00126	-.03115	-.00072

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = 5.000  
Y = 200.000 PCYPR = .000

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

IA13 SRB(SB) W/O PLUMES SEPARATING FROM ORTIO

(RTJ04) ( 31 JUL 75 )

RUN NO. 647/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.163	.317	-.09503	-.00807	-.03006	-.00154
.171	50.119	-.05714	-.00507	-.02992	-.00154
.155	100.140	-.06009	-.00385	-.03006	-.00131
.255	150.120	-.06275	-.00285	-.02994	-.00118
.198	200.150	-.06481	-.00207	-.02951	-.00111
.189	300.060	-.06747	-.00100	-.02889	-.00133
.183	400.240	-.06872	-.00053	-.02707	-.00231
.179	599.980	-.06719	-.00087	-.02494	-.00456
.221	800.000	-.06186	-.00432	-.03035	-.00192
.162	999.940	-.06175	-.00451	-.03050	-.00151

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = 5.000  
Y = 400.000 PCYPR = .000

ORIGINAL PAGE IS  
OF POOR QUALITY

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJA04) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 050/ 0 RN/L = 6.63

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = 5.000  
 Y = 400.000 PCHEER = .000

X	Z	CN	CLM	CY	CYN
900.370	-1.165	-0.7129	-0.0620	-0.0687	.00109
900.400	49.922	-0.7323	-0.0659	-0.0826	.00106
900.400	49.927	-0.7490	-0.0712	-0.1017	.00077
900.520	149.990	-0.7610	-0.0764	-0.1203	.00082
900.610	200.340	-0.7696	-0.0801	-0.1350	.00094
900.450	300.520	-0.7615	-0.0807	-0.1781	.00069
900.540	400.850	-0.7311	-0.0808	-0.2543	.00021
900.700	600.930	-0.7194	-0.0555	-0.3227	.00102
900.750	800.770	-0.7373	-0.0108	-0.3121	-0.0017
900.500	999.310	-0.7288	.00121	-0.2928	-0.00221

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 051/ 0 RN/L = 6.63

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -5.000  
 Y = .000 PCHEER = .000

X	Z	CN	CLM	CY	CYN
.469	801.070	-0.7197	-0.00981	.03259	.00522
.463	801.130	-0.7053	-0.00666	.03268	.00291
.209	1000.100	-0.7522	.00043	.03144	.00112

X	Z	CN	CLM	CY	CYN
300.590	600.490	-0.09512	-0.01525	.03121	.00707
300.040	798.850	-0.7038	-0.00768	.03229	.00311
300.170	998.960	-0.7136	-0.00276	.03096	.00181

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ405) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3003 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 653/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
800.800	400.270	-.04274	-.01107	.01840	.00505
801.020	601.790	-.06236	-.02098	.02771	.00578
800.830	801.110	-.07126	-.00913	.03170	.00409
800.550	999.960	-.05936	-.00563	.03091	.00264

RUN NO. 654/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.340	398.900	-.04078	-.00778	.01957	.00288
900.600	599.830	-.05571	-.01717	.02632	.00753
900.760	800.500	-.06982	-.01137	.02982	.00531
900.460	998.790	-.06831	-.00718	.03091	.00323

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 652/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
.451	200.840	-.08809	-.00335	.05878	.00511
.463	300.070	-.07829	-.00607	.04944	.00590
.517	400.780	-.07336	-.00800	.04355	.00400
.436	600.670	-.06997	-.00720	.03553	.00412
.445	800.830	-.07087	-.00433	.03421	.00183
.230	1000.100	-.07571	.00175	.03406	-.00034

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -5.000  
 Y = .000 PCHPR = .500

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -5.000  
 Y = 200.000 PCHPR = .000

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ406) ( 31 JUL 75 )

1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORBIT

(RTJ08) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 659/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
300.360	99.646	-.06663	-.01367	.04663	.0123
300.350	150.110	-.06996	-.01409	.04635	.01160
300.420	199.910	-.07284	-.01303	.04381	.01281
300.640	300.900	-.07368	-.01269	.03914	.01368
300.660	400.720	-.07190	-.01054	.03690	.00936
300.580	600.750	-.07041	-.00873	.03543	.00495
300.570	800.940	-.06547	-.00646	.03358	.00314
300.320	1000.100	-.07269	-.00686	.03323	.00076

RUN NO. 658/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
600.610	50.640	-.06151	-.01159	.02991	.00767
600.600	100.390	-.06067	-.01014	.02642	.00788
600.560	150.040	-.05637	-.01120	.02467	.00836
600.370	199.310	-.05518	-.01218	.02419	.00871
600.230	298.530	-.05566	-.01348	.02522	.01128
600.700	400.890	-.06831	-.01473	.02794	.01379
600.770	600.900	-.06936	-.01111	.03556	.00629
600.800	800.910	-.07015	-.00747	.03350	.00369
600.570	1000.000	-.07017	-.00370	.03248	.00196

RUN NO. 655/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
900.830	.911	-.06067	-.01110	.03385	.00290
900.660	50.319	-.05573	-.01010	.02830	.00399
900.530	100.240	-.05501	-.00981	.02418	.00516
900.690	150.340	-.05352	-.01020	.01962	.00648
900.510	200.320	-.05187	-.01072	.01672	.00754
900.460	299.390	-.04983	-.01147	.01590	.00831
899.980	397.510	-.05462	-.01166	.01954	.00961
901.030	601.210	-.06764	-.01517	.03475	.00940
900.920	800.870	-.07104	-.00830	.03232	.00451
900.710	999.950	-.06804	-.00623	.03165	.00303

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -5.000  
 Y = 200.000 PCORR = .000

DATE 08 AUG 76

1A13 SOURCE DATA

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(RTJ407) ( 31 JUL 75 )

REFERENCE DATA

BREF = 2000.0000 90.FT. XRRP = 1167.0000 IN. X8  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. Y5  
 BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. Z5  
 SCALE = .0100

RUN NO. 661/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
.296	150.250	-.07576	-.00182	.05424	-.00244
.294	200.090	-.07863	-.00007	.05103	-.00163
.235	300.020	-.07150	-.00399	.04253	.00177
.414	400.400	-.06914	-.00537	.03761	.00326
.329	500.490	-.06857	-.00414	.03585	.00209
.373	600.510	-.07261	-.00040	.03749	-.00122
.264	1000.000	-.06922	-.00042	.03340	-.00086

RUN NO. 660/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
299.890	98.794	-.06918	-.00733	.04978	.00454
300.390	150.410	-.07105	-.00668	.04746	.00452
300.390	200.320	-.07242	-.00607	.04669	.00384
300.330	299.910	-.07698	-.00319	.04490	.00253
300.310	399.850	-.07226	-.00507	.03890	.00360
300.240	599.650	-.06895	-.00600	.03518	.00338
300.210	799.540	-.07005	-.00299	.03501	.00084
300.310	999.390	-.07245	.00085	.03503	-.00118

RUN NO. 657/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
600.400	-.194	-.06511	-.00977	.04824	.01200
600.540	49.959	-.06700	-.01038	.04717	.01185
600.570	100.050	-.06791	-.01078	.04582	.01116
600.650	150.250	-.06868	-.01061	.04584	.00984
600.690	200.350	-.06954	-.01018	.04814	.00835
600.700	300.310	-.07217	-.00929	.04910	.00554
600.820	400.490	-.07591	-.00513	.04112	.00458
600.750	600.590	-.06998	-.00674	.03693	.00384
600.820	800.770	-.06887	-.00534	.03365	.00270
600.840	1000.100	-.07130	-.00100	.03418	.00003

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -5.000  
 Y = 400.000 PCNTR = .000

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORT10

(RTJ407) (31 JUL 75)

## REFERENCE DATA

SREF = 2000.0000 90.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1200.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1200.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 656/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
900.590	.226	-.08167	-.01185	.04350	.01242
900.680	50.462	-.06265	-.01231	.04282	.01220
900.720	100.570	-.06434	-.01.64	.04228	.01142
900.610	150.560	-.06581	-.01.17	.04206	.01112
900.740	200.530	-.06711	-.01331	.04131	.01078
900.590	300.320	-.07006	-.01280	.03843	.01113
900.540	309.560	-.07208	-.00978	.04209	.00762
900.450	559.310	-.07087	-.00750	.03669	.00435
900.470	799.560	-.06835	-.00653	.03219	.00380
900.470	999.470	-.06965	-.00326	.03277	.00152

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -5.000  
 Y = 400.000 PCHPER = .000

## REFERENCE DATA

SREF = 2000.0000 90.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1200.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1200.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 663/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
.258	800.100	-.05697	-.00577	.02606	.00268

RUN NO. 664/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
300.300	800.100	-.05951	-.00552	.02660	.00248

RUN NO. 665/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.850	800.060	-.06459	-.00276	.03435	-.00164

RUN NO. 666/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
900.830	800.280	-.06917	-.00115	.03582	-.00215

(RTJ408) (31 JUL 75)

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -5.000  
 Y = 800.000 PCHPER = .000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ409) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 667/ 0 RN/L = 6.65

X	Z	CN	CLM	CY	CYN
.158	800.000	08483	-.00415	.06389	.00197

RUN NO. 668/ 0 RN/L = 6.66

X	Z	CN	CLM	CY	CYN
300.490	800.140	-.07141	-.00073	.07821	-.00377

RUN NO. 669/ 0 RN/L = 6.65

X	Z	CN	CLM	CY	CYN
800.770	800.270	-.07396	-.00010	.07680	-.00371

RUN NO. 670/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
800.780	800.270	-.07449	-.00086	.07865	-.00156

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ410) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 680/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.355	300.010	-.07848	-.00232	.07893	.00529
.363	400.490	-.07508	-.00495	.07490	.00581
.432	600.410	-.07261	-.00502	.07296	.00400
.465	800.650	-.07573	-.00194	.07333	.00060
.225	1000.100	-.07944	.00250	.07321	-.00230

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = -10.000  
Y = 800.000 PCHEER = .000

## PARAMETRIC DATA

MACH = 4.533 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -10.000 DBETA = -10.000  
Y = 400.000 PCHEER = .000



1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ410) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2880.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BRFF = 1291.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -10.000  
 Y = 400.000 PCHMR = .000

RUN NO. 677/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
200.600	200.340	-.07187	-.00856	.08191	.00865
300.530	300.090	-.07758	-.00517	.07729	.00802
300.480	400.350	-.07847	-.00447	.07322	.00748
300.670	600.350	-.07342	-.00584	.07355	.00473
300.630	800.730	-.07338	-.00148	.07087	.00294
300.220	1000.100	-.07793	.00091	.07263	-.00115

RUN NO. 676/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.430	100.060	-.06843	-.01225	.07782	.01152
600.470	190.230	-.06772	-.01259	.07788	.01636
600.680	200.230	-.06849	-.01215	.07708	.01505
600.690	300.310	-.07194	-.01026	.07367	.01111
600.650	400.330	-.07513	-.00732	.07149	.01034
600.630	600.480	-.07478	-.00645	.07322	.00593
600.640	800.780	-.07330	-.00557	.07057	.00402
600.370	1000.000	-.07528	-.00189	.07114	.00076

RUN NO. 571/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.530	.000	-.06318	-.01244	.08877	.01969
900.580	48.890	-.06310	-.01321	.06774	.01916
900.560	99.909	-.06399	-.01391	.06665	.01916
900.620	150.040	-.06493	-.01453	.06543	.01916
900.570	200.070	-.06595	-.01480	.06537	.01906
900.560	300.240	-.06846	-.01422	.06545	.01861
900.950	400.660	-.07087	-.01205	.06920	.01531
900.960	600.550	-.07333	-.00836	.07110	.00832
900.900	800.630	-.07462	-.00588	.06996	.00477
900.360	999.930	-.07325	-.00423	.06971	.00273

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTUN11) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 679/ 0 RM/L = 8.63

X	Z	CN	CLM	CY	CYN
.553	401.330	-.08828	-.01405	.06326	.01607
.436	600.670	-.07254	-.00814	.07034	.00674
.553	800.880	-.07485	-.00502	.07066	.00332
.142	1000.000	-.08048	.00188	.07155	-.00070

RUN NO. 678/ 0 RM/L = 8.63

X	Z	CN	CLM	CY	CYN
300.640	300.830	-.06626	-.01748	.05501	.02518
300.360	400.570	-.06302	-.01685	.05524	.02001
300.650	600.630	-.07173	-.01028	.06698	.00867
300.790	800.910	-.07498	-.00606	.07063	.00430
300.230	999.970	-.07727	-.00110	.07014	.00096

RUN NO. 672/ 0 RM/L = 8.62

X	Z	CN	CLM	CY	CYN
600.250	199.660	-.05278	-.01349	.03905	.01671
599.680	298.800	-.05254	-.01592	.04056	.01935
600.390	399.810	-.05687	-.01783	.05132	.02050
600.760	600.820	-.06887	-.01385	.06370	.01223
600.780	800.990	-.07532	-.00704	.07004	.00515
600.280	999.960	-.07411	-.00415	.06916	.00267

RUN NO. 673/ 0 RM/L = 8.63

X	Z	CN	CLM	CY	CYN
900.070	199.210	-.05565	-.00787	.03687	.01034
900.670	299.930	-.05015	-.01037	.03993	.01068
901.070	400.840	-.05087	-.01352	.04875	.01239
900.550	599.950	-.06588	-.01720	.06139	.01484
900.200	798.960	-.07443	-.00825	.06739	.00845
900.560	999.160	-.07269	-.00590	.06956	.00401

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -10.000  
 Y = 200.000 PCHGR = .000

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 OF POOR QUALITY

(RTJ412) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -10.000  
 Y = .000 PCHEER = .000

RUN NO. 661/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.523	601.090	-.07759	-.00808	.06767	.00779
.648	801.170	-.07561	-.00820	.06964	.00379
.167	1000.000	-.08078	.00139	.08828	.00049

RUN NO. 662/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.470	600.500	-.07061	-.01516	.06539	.00861
299.920	798.670	-.07568	-.00696	.06805	.00476
300.010	998.910	-.07660	-.00209	.06869	.00159

RUN NO. 675/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.710	400.270	-.04520	-.00992	.04812	.00694
600.950	601.500	-.06514	-.02058	.06394	.01219
600.920	801.140	-.07617	-.00856	.06855	.00562
600.340	999.930	-.07409	-.00514	.06857	.00300

RUN NO. 674/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.290	299.630	-.03631	-.00821	.03466	.00743
900.600	400.210	-.03978	-.00831	.04620	.00530
900.360	599.010	-.05680	-.01567	.06000	.01029
900.930	801.320	-.07636	-.01057	.06646	.00717
900.530	999.670	-.07411	-.00648	.06769	.00435

DATE 08 AUG 78

1A13 SOURCE DATA

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1A13 SRS(68) W/O PLUMES SEPARATING FROM 08T10

(RTJ413) (31 JUL 78)

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.5 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -20.000  
 Y = .000 PCHEBR = .000

RUN NO. 689/ 0 RN/L = 6.62

	X	Z	CN	CLM	CY	CYN
	.708	801.350	-.08811	-.00972	.18940	.00823
	1.197	801.770	-.09578	-.00227	.1773	.00017
	-.705	999.800	-.09564	.00509	.16608	-.00283

RUN NO. 690/ 0 RN/L = 6.62

	X	Z	CN	CLM	CY	CYN
	300.430	999.840	-.08858	-.01078	.18948	.00973
	299.720	799.080	-.08025	-.00531	.18734	.00371
	299.950	998.320	-.09505	.00300	.16869	-.00295

RUN NO. 683/ 0 RN/L = 6.62

	X	Z	CN	CLM	CY	CYN
	600.560	400.190	-.05204	-.00829	.13913	.00192
	600.820	601.100	-.08738	-.01373	.18842	.01057
	600.990	801.290	-.08900	-.00854	.16688	.00620
	599.280	999.760	-.09283	-.00089	.17000	-.00078

RUN NO. 684/ 0 RN/L = 6.62

	X	Z	CN	CLM	CY	CYN
	899.950	398.100	-.04586	-.00539	.13776	-.00151
	900.080	599.700	-.07573	-.01070	.16016	.00893
	900.960	801.570	-.08919	-.00964	.16569	.00746
	900.050	998.640	-.08838	-.00478	.16897	.00228

IA13 SR8(S8) W/O PLUMES SEPARATING FROM 09T10 (RTJ414) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2680.000 SQ.FT. XPRP = 1187.000 IN. XS  
 LREF = 1290.300 INCHES YPRP = .0000 IN. YS  
 BRP = 1290.300 INCHES ZPRP = 400.000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.003  
 ALPHA = .000 BETA = .003  
 DALPHA = -10.000 DBETA = -20.003  
 Y = 200.000 PCHEM = .003

RUN NO. 692/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
-1.101	599.870	-.08210	-.00900	.16207	.00979
-.148	799.570	-.08831	-.00434	.16812	.00268
-.467	999.740	-.09490	.00420	.17110	-.00499

RUN NO. 691/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.430	600.290	-.07680	-.01298	.16188	.01152
300.890	801.030	-.08804	-.00590	.16748	.00518
300.540	1000.200	-.09285	.00086	.17220	-.00282

RUN NO. 689/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
598.860	397.820	-.04885	-.01956	.13035	.02025
800.680	600.230	-.07235	-.01808	.15872	.01424
801.000	800.920	-.08675	-.00730	.16597	.00664
599.380	999.840	-.08831	-.00277	.16307	.00049

RUN NO. 685/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
899.400	200.520	-.04820	-.00756	.07383	.01753
900.660	300.030	-.03584	-.01297	.09359	.01624
900.890	400.230	-.04529	-.01325	.12167	.01407
900.670	600.010	-.07255	-.01645	.15478	.01626
901.000	800.750	-.08584	-.00858	.16553	.00736
899.530	999.810	-.08546	-.00503	.18729	.00347

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13 SRB(SB) W/O PLUMES SEPARATING FROM ORBIT

(RT-J-15) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 894/ 0 RM/L = 6.62

X	Z	CN	CLM	CY	CYN
.398	800.280	-.07982	-.00783	.16348	.00881
.854	800.880	-.08712	-.00339	.18900	.00200
-.591	999.940	-.09417	.00398	.17434	-.00672

RUN NO. 883/ 0 RM/L = 6.62

X	Z	CN	CLM	CY	CYN
299.880	399.850	-.06373	-.01843	.12538	.03037
300.470	600.190	-.07721	-.01018	.15996	.01172
300.890	800.700	-.08682	-.00442	.16776	.00393
299.420	999.900	-.09081	.00090	.17152	-.00370

RUN NO. 687/ 0 RM/L = 6.62

X	Z	CN	CLM	CY	CYN
600.710	200.460	-.08823	-.01521	.11043	.03801
600.170	300.280	-.08434	-.01624	.11591	.03477
599.970	399.550	-.06455	-.01550	.13192	.02680
600.680	600.170	-.07312	-.01308	.15368	.01596
600.840	800.720	-.08577	-.00560	.16662	.00533
599.450	999.850	-.08673	-.00228	.16884	-.00002

RUN NO. 688/ 0 RM/L = 6.62

X	Z	CN	CLM	CY	CYN
899.920	199.990	-.07088	-.01266	.11182	.03305
900.840	300.080	-.06347	-.01836	.11996	.03122
901.040	400.150	-.06401	-.01633	.13659	.02534
900.710	600.340	-.07338	-.01270	.15111	.01670
900.390	799.960	-.08415	-.00686	.16422	.00644
900.360	999.450	-.08504	-.00411	.16668	.00277

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -20.000  
 Y = 400.000 PCFMR = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10 (RTJN16) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 695/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
-1.666	799.940	-.06961	.00273	.18074	-.00998

RUN NO. 696/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
300.520	800.230	-.08705	.00051	.17466	-.00509

RUN NO. 697/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.600	800.260	-.08468	-.00172	.16933	-.00080

RUN NO. 698/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.780	800.230	-.08406	-.00265	.16572	.00166

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJN17) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 699/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
.467	601.410	-.17417	-.00823	-.03476	.00042
.624	801.540	-.17095	-.00675	-.03928	.00082
-.130	999.600	-.17320	-.00019	-.04123	.00128

RUN NO. 702/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.200	599.110	-.14978	-.01771	-.04604	.00237
901.130	801.610	-.17252	-.01059	-.04459	.00334
900.240	999.690	-.18937	-.00662	-.04080	.00056

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -10.000 DBETA = -20.000  
 Y = 800.000 PCMBR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = 5.000  
 Y = .000 PCMBR = .000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ418) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BRPF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 700/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
-.262	598.770	-.17498	-.00271	-.03361	.00095
-.079	799.350	-.17646	.00200	-.03781	.00043
-.067	999.190	-.17868	.00743	-.03868	-.00010

RUN NO. 703/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
901.290	602.910	-.18211	-.01122	-.03522	.00414
900.530	800.360	-.17647	-.00500	-.03738	.00162
900.240	999.050	-.16889	-.00449	-.03991	.00107

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BRPF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 701/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
.225	600.390	-.16873	.00344	-.03297	-.00277
.210	800.340	-.16908	.00399	-.03409	-.00316
-.010	999.600	-.15875	-.00123	-.03845	-.00108

RUN NO. 704/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.800	601.300	-.17966	-.00303	-.03123	.00024
901.020	801.350	-.17415	-.00157	-.03799	.00138
900.210	998.990	-.17530	.00358	-.03977	.00074

## PARAMETRIC DATA

MACH = 4.530 PTOTA = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = 5.000  
 Y = 200.000 PCHEP = .000

(RTJ419) ( 31 JUL 75 )

## PARAMETRIC DATA

MACH = 4.530 PTOTA = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = 5.000  
 Y = 400.000 PCHEP = .000



1A13 SRB(S8) W/O PLUMES SEPARATING FROM 09T10

(RTJ420) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 714/ 0 RN/L = 6.83

X	Z	CN	CLM	CY	CYN
.590	801.370	-.15690	-.01399	.03634	.00585
-.096	999.670	-.16480	-.00560	.03895	.00239

RUN NO. 713/ 0 RN/L = 6.83

X	Z	CN	CLM	CY	CYN
300.870	901.110	-.14485	-.02117	.03300	.00759
299.820	999.800	-.16398	-.00737	.03833	.00278

RUN NO. 705/ 0 RN/L = 6.83

X	Z	CN	CLM	CY	CYN
800.220	999.870	-.12373	-.03138	.02084	.01361
800.820	801.040	-.13991	-.02419	.03286	.00747
800.070	999.690	-.16180	-.00954	.03734	.00367

RUN NO. 706/ 0 RN/L = 6.83

X	Z	CN	CLM	CY	CYN
900.830	800.420	-.11878	-.02438	.02086	.00978
901.730	803.000	-.14495	-.02187	.03311	.00751
900.320	999.640	-.15647	-.01328	.03618	.00472

1A13 SRB(S8) W/O PLUMES SEPARATING FROM 09T10

(RTJ421) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 715/ 0 RN/L = 6.83

X	Z	CN	CLM	CY	CYN
.051	799.540	-.16403	-.00746	.04086	.00366
-.207	999.240	-.16528	-.00324	.04032	.00170

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -5.000  
 Y = .000 PCHGR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -5.000  
 Y = .000 PCHGR = .000

DATE 08 AUG 76

1A13 SOURCE DATA

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10 (RTJA21) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 711/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN
300.670	600.920	-.16707	-.01020	.03578	.00977
300.950	601.020	-.16469	-.00885	.04023	.00462
300.380	599.640	-.16448	-.00523	.04015	.00240

RUN NO. 708/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN
600.280	599.720	-.15921	-.01628	.03108	.01245
600.120	799.370	-.16125	-.01151	.03618	.00669
600.130	999.290	-.16427	-.00629	.03950	.00290

RUN NO. 707/ 0 RN/L = 8.63

X	Z	CN	CLM	CY	CYN
900.950	601.300	-.14928	-.02383	.02911	.01430
900.850	801.170	-.15950	-.01383	.03318	.00907
900.500	999.640	-.16426	-.00768	.03932	.00372

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 718/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN
.239	600.590	-.16745	-.00360	.04981	.00081
.606	800.990	-.16798	-.00215	.04368	.00147
-.136	999.760	-.17232	.00349	.04458	-.00148

RUN NO. 712/ 0 RN/L = 8.62

X	Z	CN	CLM	CY	CYN
300.020	599.150	-.17321	-.00097	.05037	.00070
300.190	799.910	-.16558	-.00473	.04319	.00228
300.120	999.460	-.16765	-.00041	.04208	.00068

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -5.000  
 Y = 200.000 PCHEP2 = .000

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -5.000  
 Y = 400.000 PCHEP2 = .000

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10 (RTJA22) ( 31 JUL 75 )

(RTJ422) ( 31 JUL 75 ) 1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 709/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
600.770	800.980	-.17819	-.00377	.04719	.00395
600.650	801.120	-.16808	-.00505	.04385	.00247
600.370	999.500	-.16430	-.00371	.04026	.00209

RUN NO. 710/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.750	600.850	-.16941	-.01002	.04488	.00624
900.030	799.150	-.17218	-.00370	.04361	.00283
900.320	999.420	-.16441	-.00529	.04054	.00255

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ423) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 717/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
-.011	799.880	-.15206	-.00425	.03347	.00216

RUN NO. 718/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN
300.440	800.240	-.15822	-.00099	.04325	-.00326

RUN NO. 719/ 0 RN/L = 6.61

X	Z	CN	CLM	CY	CYN
600.630	800.500	-.16583	.00218	.04661	-.00417

RUN NO. 720/ 0 RN/L = 6.62

X	Z	CN	CLM	CY	CYN
900.740	800.700	-.16823	.00172	.04514	-.00249

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -5.000  
Y = 400.000 PCHEER = .000

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -5.000  
Y = 800.000 PCHEER = .000

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 SRB(88) W/O PLUMES SEPARATING FROM 09T10

(RTJN24) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 721/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
-.329	799.910	-.16525	.00111	.09403	-.00722

RUN NO. 722/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
300.580	800.510	-.17084	.00298	.09477	-.00811

RUN NO. 723/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
600.600	800.630	-.17117	.00145	.09119	.00299

RUN NO. 724/ 0 RN/L = 6.63

X	Z	CN	CLM	CY	CYN
900.920	800.780	-.17010	-.00138	.08748	-.00001

IA13 SRB(58) W/O PLUMES SEPARATING FROM 09T10

(RTJN25) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 724/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN
-.843	801.480	-.15840	-.01658	.07754	.00783
-.450	999.520	-.16771	-.00632	.08159	.00314

RUN NO. 733/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN
300.860	801.000	-.14881	-.02502	.07808	.00863
299.570	999.710	-.16651	-.00817	.08072	.00373

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -10.000  
 Y = 800.000 PCHEER = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -10.000  
 Y = 800.000 PCHEER = .000

ORIGINAL PAGE IS  
 OF POOR QUALITY

(RTJ425) ( 31 JUL 75 )

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 725/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN
599.870	598.940	-.11549	-.03284	.08559	.01244
600.730	600.770	-.14091	-.02475	.07435	.00942
599.780	599.540	-.16277	-.01094	.08031	.00458

RUN NO. 726/ 0 RN/L = 6.58

X	Z	CN	CLM	CY	CYN
900.580	600.380	-.11063	-.02679	.06287	.01004
902.070	603.680	-.14342	-.02358	.07441	.00929
900.390	999.790	-.15712	-.01480	.07948	.00559

1A13 SRB(SB) W/O PLUMES SEPARATING FROM OST10

(RTJ426) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 735/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
.131	799.630	-.16039	-.01188	.07950	.00723
-.215	999.280	-.16696	-.00497	.08268	.00258

RUN NO. 731/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
300.480	601.920	-.14889	-.02082	.06099	.01902
300.640	601.010	-.15523	-.01808	.07821	.00967
299.790	998.600	-.16843	-.00877	.08217	.00349

RUN NO. 728/ 0 RN/L = 6.64

X	Z	CN	CLM	CY	CYN
600.430	600.240	-.14488	-.02278	.05860	.01381
600.400	600.060	-.14824	-.01998	.07098	.01207
600.250	999.400	-.16503	-.00800	.08145	.00439

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -10.000  
 Y = .000 PCHEB = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -10.000  
 Y = 200.000 PCHEB = .000

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IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ-26) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 717 0 RN/L = 8.64

X	Z	CM	CLM	CY	CYN
910.520	600.370	-.14318	-.02378	.08253	.01788
903.820	800.790	-.15047	-.01937	.07231	.01128
900.500	999.840	-.18172	-.01122	.07961	.00612

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -10.000  
 Y = 200.000 PCMR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 735/ 0 RN/L = 8.64

X	Z	CM	CLM	CY	CYN
.595	800.990	-.18772	-.00940	.08868	.00295
-.232	999.630	-.17052	-.00104	.08595	.00035

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -10.000  
 Y = 400.000 PCMR = .000

RUN NO. 732/ 0 RN/L = 8.64

X	Z	CM	CLM	CY	CYN
300.640	801.010	-.15523	-.01808	.07821	.00967

RUN NO. 72/ 0 RN/L = 8.64

X	Z	CM	CLM	CY	CYN
600.750	600.990	-.17086	-.00880	.08358	.00918
600.820	800.980	-.18868	-.00715	.08911	.00911
600.340	999.820	-.16648	-.00531	.08368	.00290

RUN NO. 730/ 0 RN/L = 8.64

X	Z	CM	CLM	CY	CYN
900.720	900.780	-.18181	-.01585	.07844	.01332
900.030	799.310	-.16835	-.00791	.08009	.00781
900.350	999.810	-.18708	-.00835	.08334	.00363

(RTJ-27) (31 JUL 75)

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ429) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 737/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
.817	801.400	-.17860	-.01107	.17977	.00790
-1.353	999.410	-.18162	-.00580	.18454	.00140

RUN NO. 738/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
300.300	799.900	-.17425	-.01375	.18026	.00767
299.780	999.290	-.17941	-.00791	.18157	.00381

RUN NO. 743/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
600.930	800.820	-.16927	-.01688	.18218	.00738
598.610	999.410	-.17915	-.00888	.18088	.00527

RUN NO. 747/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
900.570	800.180	-.16423	-.01948	.18273	.00745
900.150	999.820	-.17844	-.00977	.18163	.00804

1A13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ429) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 740/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
.291	800.440	-.16946	-.01411	.17151	.01248
-.279	999.240	-.17732	-.00692	.18121	.00406

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -20.000  
 Y = .000 PCHEER = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -20.000  
 Y = 200.000 PCHEER = .000

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ429) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XTRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YTRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZTRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 739/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
300.660	800.670	-.15129	-.02348	.17173	.01298
300.250	999.740	-.17640	-.00816	.18083	.00500

RUN NO. 746/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
600.330	800.200	-.14692	-.02408	.16628	.01540
800.140	999.890	.17441	-.00949	.18018	.00584

RUN NO. 745/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
900.330	800.130	-.15079	-.02296	.16562	.01543
900.480	999.820	-.16991	-.01310	.18028	.00696

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 09T10

(RTJ430) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XTRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YTRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZTRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 741/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
.588	800.800	-.16708	-.01259	.17482	.01108
-.058	999.560	-.17588	-.00558	.18183	.00327

RUN NO. 742/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
300.250	800.380	-.15817	-.01824	.16862	.01556
299.870	999.450	-.17482	-.00680	.18040	.00420

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -20.000  
 Y = 200.000 PCHMR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 ALPHA = .000 BETA = .000  
 DALPHA = -20.000 DBETA = -20.000  
 Y = 400.000 PCHMR = .000

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IA13 SOURCE DATA

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IA13 SRB(SB) W/O PLUMES SEPARATING FROM 08T10 (RTJN30) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 747/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
600.580	800.660	-.15507	-.02009	.16268	.01785
600.420	999.760	-.17425	-.00811	.18081	.00538

RUN NO. 748/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
800.290	800.230	-.15662	-.01806	.16486	.01608
900.520	999.960	-.16997	-.01111	.17788	.00761

IA13 SRB(SB) W/O PLUMES SEPARATING FROM 08T10 (RTJN31) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 749/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
-1.218	799.600	-.17653	-.00184	.18847	-.00174

RUN NO. 750/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN
300.610	800.660	-.17593	-.00355	.18719	.00098

RUN NO. 751/ 0 RN/L = 6.59

X	Z	CN	CLM	CY	CYN
600.610	800.410	-.17750	-.00352	.18825	.00109

RUN NO. 752/ 0 RN/L = 6.60

X	Z	CN	CLM	CY	CYN
900.560	800.510	-.18176	-.00207	.18025	.00074

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -20.000  
Y = 400.000 PCMR = .000

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
ALPHA = .000 BETA = .000  
DALPHA = -20.000 DBETA = -20.000  
Y = 800.000 PCMR = .000

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1A13 SOURCE DATA

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(RTJ432) ( 31 JUL 75 )

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 08T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 853/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN
-.212	.020	-.00098	-.00485	-.04583	-.00205
.003	49.980	.00009	-.00408	-.04286	-.00175
-.484	97.865	.00221	-.00262	-.04460	-.00263
.926	147.510	.00755	-.00348	-.04228	-.00339
.893	200.060	.00054	-.00768	-.03950	-.00159
.296	239.900	-.01729	-.02261	-.03233	.00449
-.058	400.140	-.01348	-.01620	-.04277	.00015
-.687	599.770	-.01381	-.00878	-.04063	-.00135

RUN NO. 854/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN
201.850	-.627	.00118	-.00859	-.02440	.00576
201.440	50.754	-.00224	-.00932	-.02758	.00575
200.450	100.860	.00085	-.01101	-.02830	.00494
201.340	150.740	.00010	-.01111	-.03154	.00414
200.720	200.790	-.00134	-.01106	-.03444	.00371
199.840	301.700	-.01065	-.01125	-.03719	.00154
199.300	400.480	-.01779	-.00962	-.03430	-.00133
200.220	599.820	-.00282	-.00373	-.04238	-.00619

RUN NO. 855/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN
400.180	-.242	-.00025	-.00400	-.04152	-.00638
399.720	49.698	.00174	-.00475	-.04404	-.00555
400.090	99.521	.00234	-.00483	-.04518	-.00494
399.790	149.480	.00270	-.00488	-.04618	-.00487
400.280	199.110	.00252	-.00484	-.04639	-.00487
400.810	299.000	.00219	-.00471	-.04681	-.00512
402.110	398.910	.00351	-.00511	-.04562	-.00526
400.070	598.380	.00559	-.00608	-.04551	-.00463

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = 5.000  
DALPHA = 5.000 DBETA = 5.000  
X .000 PC448 = 1500.000

(RTJ433) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 858/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
.415	.359	-.01658	-.00890	-.00195	.00388
1.202	50.065	-.00706	-.00527	-.00896	-.00039
.699	99.791	-.00052	-.00124	-.01082	-.00304
.173	149.840	.00200	-.00072	-.01286	-.00296
-1.278	202.170	.00070	-.00359	-.01151	-.00046
.007	299.740	-.01189	-.01811	-.00189	.00829
.334	399.760	-.01157	-.01476	-.00585	.00358
.398	599.860	-.01469	-.00918	-.00296	.00105

RUN NO. 857/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
199.680	-.711	-.00384	-.00803	.01215	.00788
199.500	49.019	-.00387	-.00858	.00913	.00729
199.450	99.180	-.00280	-.00848	.00598	.00632
200.040	149.010	-.00077	-.00856	.00334	.00623
200.430	198.220	-.00033	-.00906	.00257	.00557
200.960	298.970	-.00643	-.00950	.00009	.00428
199.630	400.010	-.01423	-.01010	.00148	.00188
201.480	601.540	-.01179	-.00615	-.00204	-.00199

RUN NO. 856/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
402.890	.048	-.00443	-.00479	-.00312	-.00048
400.650	50.201	-.00278	-.00562	-.00483	.00008
400.250	100.420	-.00177	-.00643	-.00617	.00037
400.220	150.570	-.00241	-.00684	-.00686	.00021
401.100	200.430	-.00442	-.00681	-.00685	-.00021
399.650	301.240	-.00880	-.00488	-.00715	-.00112
399.930	400.830	-.00808	-.00468	-.00763	-.00168
400.120	599.890	-.00007	-.00801	-.01022	-.00019

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = 5.000 DBETA = .000  
 X = .000 PCMB = 1500.000

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IA13 SOURCE DATA

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(RTJN3N) ( 31 JUL 75 )

## REFERENCE DATA

BREF = 2090.0000 SQ.FT. YMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES YMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = 5.000 DBETA = 5.000  
 X = .000 PCWRE = 1500.000

RUN NO. 999/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
.371	400.210	-.00871	-.01758	.02319	.01201
-.164	600.150	-.01310	-.00835	.02261	.00608

RUN NO. 902/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
199.450	-.538	-.01104	-.00895	.04039	.01721
199.250	49.110	-.00701	-.00670	.04093	.01438
199.020	98.882	-.00679	-.00697	.04033	.01296
200.090	148.990	-.00444	-.00914	.03653	.01342
201.340	198.560	-.00075	-.00968	.03369	.01362
201.830	299.080	-.00804	-.00759	.02948	.01105
200.100	399.910	-.01169	-.00912	.02592	.00817
200.720	599.670	-.01154	-.00786	.02423	.00574

RUN NO. 903/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
398.820	-1.232	-.00732	-.00352	.03184	.00376
401.040	50.264	-.00815	-.00365	.03046	.00458
400.750	100.320	-.00782	-.00399	.02945	.00451
400.700	150.330	-.00819	-.00473	.02813	.00446
400.670	200.330	-.00989	-.00550	.02701	.00430
400.630	301.290	-.00845	-.00563	.02744	.00327
400.660	400.890	-.01033	-.00697	.02783	.00287
400.340	599.980	-.00754	-.00602	.02153	.00461

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJA35) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 800/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
2.248	400.690	-.01622	-.02140	.05773	.02010
1.050	599.790	-.01564	-.00970	.04891	.01385

RUN NO. 925/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
201.330	198.420	-.01378	-.01226	.06592	.02485
202.070	299.500	-.00486	-.00910	.06500	.01871
200.470	399.840	-.01468	-.00883	.05824	.01411
201.050	599.720	-.01600	-.00959	.04949	.01254

PJN NO. 924/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
399.940	-.201	-.01336	-.00560	.06861	.01170
399.670	49.704	-.01434	-.00508	.06883	.01233
399.840	99.257	-.01392	-.00485	.06495	.01274
399.720	149.480	-.00998	-.00640	.06235	.01338
400.190	198.640	-.00962	-.00703	.06144	.01279
400.390	298.340	-.01150	-.00309	.05988	.01085
400.410	399.820	-.01481	-.00804	.05879	.00963
400.880	599.690	-.01469	-.00695	.05103	.01297

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 26.900  
ALPHA = .000 BETA = 5.000  
DALPHA = 5.000 DBETA = -10.000  
X = .000 PCAMB = 1500.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 901/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
.922	399.930	-.02729	-.02238	.13203	.02447
.412	599.830	-.01868	-.00742	.11673	.01458

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 26.900  
ALPHA = .000 BETA = 5.000  
DALPHA = 5.000 DBETA = -20.000  
X = .000 PCAMB = 1500.000

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJA36) ( 31 JUL 75 )

(RTJN35) ( 1 JUL 75 )

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 942/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
200.280	399.800	-.01880	-.00649	.13317	.01888
201.180	399.800	-.02218	-.00610	.12213	.01433

RUN NO. 943/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
400.820	199.900	-.01931	-.00407	.14753	.01338
401.370	297.990	-.02059	-.00436	.13255	.01898
400.860	399.970	-.02232	-.00465	.12372	.01733
401.420	599.700	-.01734	-.00545	.12892	.01150

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = 5.000 DBETA = -20.000  
 X = .000 PCHRG = 1500.000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 859/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
.273	.078	-.03498	-.00410	-.04243	.00009
-.047	50.068	-.03071	-.00322	-.03769	-.00006
-.089	100.280	-.02541	-.00245	-.03598	-.00294
-.385	150.270	-.02477	-.00331	-.03473	-.00319
.252	200.400	-.02944	-.00835	-.03243	-.00102
.140	299.990	-.04528	-.02221	-.02914	.00298
.546	400.360	-.05458	-.02432	-.03154	.00168
.167	599.910	-.05417	-.01264	-.03168	-.00382
.588	799.970	-.04457	-.01317	-.03340	-.00437
.103	999.820	-.03812	-.01506	-.03488	-.00415

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = 5.000  
 X = .000 PCHRG = 1500.000

(RTJN37) ( 31 JUL 75 )

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1A13 SOURCE DATA

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(RTJ437) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 880/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
202.130	-0.36	-0.3696	-0.1180	-0.01820	.00000
201.160	50.206	-0.3649	-0.1177	-0.02149	.00053
200.700	100.900	-0.3343	-0.1160	-0.02500	-0.00096
201.050	150.840	-0.3154	-0.1257	-0.02923	-0.00095
200.820	200.830	-0.3201	-0.1343	-0.02937	-0.00104
200.690	302.050	-0.4037	-0.1421	-0.02745	-0.00259
199.170	400.950	-0.4459	-0.1458	-0.02377	-0.00377
200.420	599.890	-0.4857	-0.1379	-0.02520	-0.00658
200.110	799.920	-0.4031	-0.1534	-0.03206	-0.00480
200.110	999.780	-0.3837	-0.1552	-0.03552	-0.00356

RUN NO. 861/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
399.400	-1.98	-0.4888	-0.1281	-0.01878	-0.01113
399.840	49.844	-0.4871	-0.1318	-0.02121	-0.01039
399.980	99.558	-0.4650	-0.1358	-0.02336	-0.00996
399.760	149.640	-0.4511	-0.1416	-0.02658	-0.00847
400.080	198.850	-0.4396	-0.1453	-0.02818	-0.00724
400.510	299.860	-0.4540	-0.1438	-0.02800	-0.00697
400.290	399.990	-0.4592	-0.1432	-0.02673	-0.00772
402.770	800.500	-0.4222	-0.1508	-0.02984	-0.00837
402.070	801.410	-0.3901	-0.1601	-0.03479	-0.00401
400.440	999.120	-0.3832	-0.1559	-0.03702	-0.00339

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = 5.000  
DALPHA = .000 DBETA = 5.000  
X = .000 PCMPB = 1500.000

(RT-J-38) 31 JUL 75

1A13 SRB (S) WITH PLUMES SEPARATING FROM ORBIT

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 864/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
.318	-1.122	-.03225	-.00934	-.00258	.00719
1.612	50.180	-.03204	-.00858	-.00306	.00347
-.153	100.120	-.01934	-.00397	-.00791	.00021
.779	149.700	-.01941	-.00345	-.00852	-.00076
.269	199.680	-.02139	-.00458	-.00747	-.00002
.518	299.680	-.03574	-.01763	-.00120	.00574
.108	399.570	-.04518	-.02740	-.00296	.00799
.610	599.830	-.04375	-.01560	-.00002	.00089
.147	800.020	-.03838	-.01460	.00057	-.00013
.479	999.920	-.03224	-.01443	-.00535	-.00058

RUN NO. 863/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
109.800	-.134	-.04154	-.00958	.00450	.01079
193.930	49.194	-.04014	-.01020	.00468	.00955
199.400	99.324	-.03654	-.01030	.00171	.00797
199.470	149.160	-.03513	-.01045	-.00044	.00721
199.720	197.990	-.03090	-.01219	-.00245	.00713
201.520	299.900	-.03499	-.01415	-.00114	.00470
200.150	400.060	-.03757	-.01661	.00347	.00211
200.090	599.920	-.03555	-.01616	.00370	.00047
200.830	799.900	-.03597	-.01498	.00158	-.00255
199.880	1000.700	-.03133	-.01492	-.02564	-.00018

RUN NO. 862/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
402.490	-.337	-.03455	-.01527	.01404	-.00529
401.230	50.437	-.03576	-.01461	.01300	-.00543
400.810	100.350	-.03718	-.01405	.01215	-.00588
400.190	150.220	-.03736	-.01348	.00977	-.00537
401.020	200.480	-.03850	-.01373	.00866	-.00468
400.860	301.180	-.03799	-.01516	.00730	-.00322
399.770	401.270	-.03681	-.01528	.00495	-.00187
400.110	599.850	-.03572	-.01493	.00308	-.00325
400.510	799.960	-.03369	-.01460	-.00287	-.00209
397.620	999.500	-.03034	-.01506	-.00847	-.00045

PARAMETRIC DATA

MACH = 4.510 PTOI = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBET = .000  
 X = .000 PCLPH = 1500.000

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IA13 SOURCE DATA

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IA13,SR8(S8)WITH PLUES SEPARATING FROM 09T10

(RTJ-38) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 983/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
800.280	799.770	-.03089	-.01578	-.00788	.00001

## PARAMETRIC DATA

MACH = 4.510 PTOFL = 28.500  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = .000  
 X = .000 PCMB = 1500.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 908/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
.688	400.140	-.04491	-.02788	.02654	.01444
.411	593.870	-.03253	-.01788	.02142	.00841
.436	799.920	-.03120	-.01532	.02173	.00644
.364	999.730	-.02702	-.01378	.01895	.00562

## PARAMETRIC DATA

MACH = 4.510 PTOFL = 28.500  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = -5.000  
 X = .000 PCMB = 1500.000

IA13,SR8(S8)WITH PLUES SEPARATING FROM 09T10

(RTJ-39) ( 31 JUL 75 )

RUN NO. 904/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
198.470	-.244	-.03843	-.01148	.03545	.01780
198.490	49.298	-.03900	-.01316	.03299	.01703
198.580	98.739	-.04140	-.01221	.03308	.01721
200.340	148.810	-.04147	-.01365	.03368	.01659
201.070	198.820	-.03802	-.01412	.02869	.01635
201.410	298.620	-.03238	-.01458	.02453	.01254
200.380	399.940	-.03181	-.01818	.02315	.00982
200.590	599.020	-.03400	-.01838	.02200	.00814
200.240	799.790	-.03080	-.01528	.02215	.00574
199.910	999.850	-.02657	-.01414	.01883	.00545

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1A13 SOURCE DATA

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1A13.SRB(S)WITH PLUMES SEPARATING FROM 09T10

(RTJA39) (31 JUL 75)

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1167.0000 IN. X5  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y5  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z5  
 SCALE = .0100

RUN NO. 905/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
400.250	- .344	-.02972	-.01463	.03151	.00460
401.240	50.344	-.03112	-.01441	.03283	.00330
400.460	100.390	-.03234	-.01384	.03345	.00270
400.520	150.270	-.03337	-.01321	.03094	.00348
400.870	200.310	-.03398	-.01298	.02759	.00477
400.810	301.270	-.03308	-.01510	.02496	.00672
399.830	401.410	-.03398	-.01529	.02275	.00721
400.100	599.980	-.03333	-.01434	.02162	.00656
400.370	799.940	-.02893	-.01453	.02072	.00532
400.220	959.930	-.02530	-.01555	.01854	.00568

RUN NO. 890/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
799.800	799.490	-.02476	-.01590	.01706	.00624

1A13.SRB(S)WITH PLUMES SEPARATING FROM 09T10

(RTJA40) (31 JUL 75)

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1167.0000 IN. X5  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y5  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z5  
 SCALE = .0100

RUN NO. 908/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
1.550	399.530	-.04280	-.02629	.05371	.02137
2.061	599.940	-.03509	-.01746	.04553	.01458
1.015	799.790	-.03647	-.01483	.04376	.01327
1.583	959.830	-.03118	-.01414	.04218	.01427

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28 900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = -10.000  
 X = .000 PCMB = 1500.000

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28 900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = -5.000  
 X = .000 PCMB = 1500.000

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1A13,SR8(88)WITH PLUMES SEPARATING FROM 09T10

(RTJ440) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BRPF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = -10.000  
 X = .000 PCHRB = 1500.000

RUN NO. 926/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
200.850	108.580	-.04439	-.01948	.05488	.02772
231.330	299.160	-.03694	-.01332	.05995	.01706
200.620	399.880	-.03172	-.01631	.05389	.01197
200.640	599.830	-.03596	-.01758	.04684	.01205
200.210	799.810	-.03522	-.01520	.04265	.01336
200.240	999.850	-.03025	-.01414	.04253	.01391

RUN NO. 927/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
392.530	-.053	-.03600	-.01256	.06103	.01150
399.240	49.958	-.03638	-.01281	.06042	.01118
399.410	99.967	-.03694	-.01222	.05800	.01248
399.180	149.780	-.03686	-.01221	.05797	.01163
399.570	198.350	-.03612	-.01209	.05876	.01056
400.820	298.200	-.03412	-.01498	.05429	.01208
400.540	400.010	-.03248	-.01694	.05057	.01089
400.230	599.850	-.03330	-.01659	.04717	.01062
400.710	799.940	-.03166	-.01483	.04381	.01366
398.830	999.920	-.02918	-.01424	.04346	.01372

RUN NO. 891/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
802.180	800.500	-.02865	-.01457	.04379	.01318

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1A13 SOURCE DATA

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1A13.SR8(SB)WITH PLUMES SEPARATING FROM DBT10

(RTJNN1) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 910/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
.907	399.800	-.04538	-.02462	.11159	.02523
1.050	599.840	-.03148	-.01846	.10190	.01374
.750	799.780	-.02810	-.01353	.11176	.00987
.108	999.820	-.02933	-.01282	.11197	.01124

RUN NO. 941/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
200.800	399.970	-.04682	-.01208	.11861	.01583
201.000	599.740	-.03338	-.01481	.10665	.01517
202.250	801.070	-.03104	-.01351	.11405	.00952
200.710	1000.000	-.02984	-.01291	.11337	.01073

RUN NO. 940/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
401.890	298.640	-.03730	-.01208	.12362	.01891
400.580	399.960	-.03720	-.01249	.11791	.01631
400.450	599.950	-.03557	-.01310	.11939	.01108
400.560	799.730	-.03320	-.01237	.11996	.00799
400.840	1000.100	-.03020	-.01299	.11436	.01058

RUN NO. 858/ 0 RN/L = 1.74

Y	Z	CN	CLP	CY	CYN
801.820	798.990	-.02948	-.01238	.11484	.01005

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DELTA = .000 DBETA = -20.000  
 X = .000 PCMB = 1500.0

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 09T10

(RTJ442) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SC = .0100

## PARAMETRIC DATA

HACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -5.000 DBETA = 5.000  
 X = .000 PCMB = 1500.000

RUN NO. 865/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
-1.093	50.193	-1.06402	-1.00155	-1.03369	.00148
-1.101	100.280	-1.05329	-1.00278	-1.03242	-1.00009
.304	150.140	-1.05045	-1.00460	-1.03109	-1.00073
.469	200.300	-1.05760	-1.00845	-1.02666	.00017
.350	300.180	-1.07359	-1.02339	-1.02512	.00349
-1.223	400.140	-1.09104	-1.03051	-1.02022	.00438
.074	500.050	-1.08111	-1.01544	-1.03231	-1.00319
.134	599.990	-1.08125	-1.01414	-1.03202	-1.00335
-1.713	1000.100	-1.06870	-1.01805	-1.03509	-1.00284

RUN NO. 866/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
199.340	50.796	-1.06889	-1.01487	-1.02224	.00217
200.950	100.630	-1.06676	-1.01456	-1.02542	.00050
201.610	150.770	-1.06315	-1.01533	-1.02919	-1.00074
201.640	201.140	-1.06202	-1.01656	-1.02958	-1.00107
200.760	302.370	-1.06519	-1.01739	-1.02673	-1.00174
199.510	401.360	-1.06784	-1.01771	-1.02402	-1.00292
200.490	500.020	-1.07533	-1.01708	-1.02583	-1.00461
200.120	799.990	-1.07296	-1.01791	-1.02912	-1.00568
200.150	999.910	-1.06608	-1.01901	-1.03510	-1.00318

RUN NO. 869/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
398.700	-1.168	-1.07157	-1.02032	-1.00918	-1.01283
399.440	49.672	-1.07214	-1.01997	-1.01141	-1.01119
399.570	99.696	-1.07293	-1.01959	-1.01275	-1.01104
399.940	149.680	-1.07428	-1.01915	-1.01395	-1.01148
399.850	199.170	-1.07367	-1.01930	-1.01754	-1.01035
400.350	298.610	-1.07146	-1.01921	-1.02157	-1.00765
400.070	400.210	-1.07022	-1.01909	-1.02260	-1.00712
399.550	500.060	-1.07270	-1.01861	-1.02646	-1.00770
402.510	601.460	-1.06874	-1.01929	-1.03399	-1.00452
400.210	1000.100	-1.06704	-1.01937	-1.03519	-1.00347

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IA13 SOURCE DATA

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IA13,SR8(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ443) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 868/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
1.627	50.165	-.05678	-.00795	-.00059	.00941
-.036	100.150	-.04371	-.00477	-.00331	.00441
.694	150.100	-.04518	-.00457	-.00953	.00288
-.022	199.870	-.04731	-.00645	-.00961	.00754
-.227	299.780	-.06914	-.01560	-.00225	.00727
.448	400.080	-.08579	-.03027	.00002	.00737
.390	599.890	-.06764	-.01964	-.00484	.00360
.033	800.000	-.07149	-.01591	-.00420	.00308
-1.455	999.050	-.06156	-.01909	-.00182	-.00180

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -5.000 DBETA = .000  
 X = .000 PCHEP = 1500.000

RUN NO. 867/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
198.690	49.732	-.08137	-.01754	.00459	.00928
198.500	99.150	-.06062	-.01714	.00755	.00908
199.510	148.860	-.06549	-.01564	-.00407	.00949
270.220	197.780	-.06882	-.01585	-.00413	.00918
201.970	299.120	-.06459	-.01668	-.00317	.00622
200.510	400.110	-.08457	-.02022	-.00147	.00471
199.780	500.020	-.03579	-.01805	-.00336	.00429
199.970	799.830	-.05928	-.02099	-.00009	.00048
201.690	1000.100	-.06011	-.02023	-.00170	-.00237

RUN NO. 872/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
401.150	-.089	-.08130	-.02288	.02054	-.00545
402.390	50.354	-.06204	-.02221	.01651	-.00350
400.030	100.330	-.08237	-.02183	.01286	-.00209
400.370	150.267	-.08294	-.02093	.00998	-.00153
400.600	200.360	-.08378	-.02038	.00914	-.00130
400.870	301.050	-.08442	-.01685	.00569	-.00007
400.410	401.660	-.00352	-.02005	.00492	.00013
400.500	599.940	-.05716	-.02193	.00172	.00009
400.480	800.020	-.05928	-.02173	.00119	-.00270
399.980	1000.000	-.05963	-.02039	-.00468	-.00143

RUN NO. 894/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
800.870	801.480	-.06012	-.02084	-.00588	-.00122

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IA13 SOURCE DATA

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(RTJ444) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. X5  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y5  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z5  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -5.000 DBETA = -5.000  
 X .000 PCH48 = 1500.000

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 08T10

RUN NO. 907/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN
-.035	400.410	-.08085	-.02878	.02188	.01502
.559	800.000	-.05546	-.02238	.02018	.01021
-.133	800.010	-.05508	-.02007	.02064	.00924
.691	999.970	-.05088	-.02091	.02079	.00695

RUN NO. 912/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN
200.060	50.028	-.05616	-.02073	.02949	.01735
198.530	88.832	-.06432	-.02101	.02887	.01947
199.590	148.870	-.06009	-.02283	.02734	.01989
200.210	198.210	-.05691	-.02261	.02342	.01821
201.390	298.670	-.05609	-.02255	.02135	.01403
200.150	400.080	-.05225	-.02495	.02350	.00931
200.500	599.990	-.05957	-.02268	.02830	.00668
202.540	801.320	-.05615	-.02099	.02829	.00569
200.490	1000.300	-.05045	-.02160	.02165	.00598

RUN NO. 913/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN
399.430	.003	-.05292	-.02232	.04023	.00304
399.790	49.910	-.05278	-.02261	.03584	.00514
399.690	99.926	-.05229	-.02294	.03312	.00630
399.240	149.890	-.05303	-.02266	.03076	.00679
398.650	198.730	-.05389	-.02218	.02657	.00798
400.370	298.480	-.05570	-.02270	.02463	.00773
400.850	400.170	-.05781	-.02317	.02728	.00585
400.280	600.100	-.06057	-.02103	.03454	.00263
402.370	801.210	-.05285	-.02211	.02941	.00542
400.940	1000.200	-.05015	-.02213	.02110	.00577

RUN NO. 889/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN
800.070	799.110	-.04980	-.02242	.02039	.00573

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM OBT10 (RTJAN5) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 908/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
.386	400.090	-.06345	-.02997	.04574	.01935
.734	599.970	-.05685	-.02282	.03649	.01675
.601	801.480	-.09103	-.01949	.03858	.01515
1.710	1000.200	-.05354	-.02020	.03859	.01419

RUN NO. 929/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
200.890	209.480	-.05519	-.02220	.04315	.02055
200.240	400.100	-.05325	-.02390	.04304	.01597
200.250	600.010	-.06392	-.02181	.04424	.01328
201.980	801.400	-.05464	-.01903	.04194	.01347
200.550	1000.200	-.05293	-.02109	.04019	.01327

RUN NO. 928/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
400.640	.331	-.05793	-.01968	.05583	.01234
400.080	100.170	-.05937	-.01906	.05588	.01285
399.120	150.000	-.05887	-.01979	.05298	.01337
398.420	198.720	-.05683	-.02076	.05024	.01306
399.900	298.120	-.05226	-.02368	.04505	.01204
400.150	400.200	-.05047	-.02520	.04398	.01099
400.500	600.030	-.05929	-.02219	.04656	.01046
400.830	799.960	-.05744	-.01998	.04309	.01164
400.660	1000.100	-.04892	-.02178	.04052	.01273

RUN NO. 892/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
799.640	801.330	-.04712	-.02291	.03898	.01299

## PARAMETRIC DATA

MACH = 4.510 PTOIL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DELTA = -5.000 ODLTA = -10.000  
 X = .000 PCHWB = 1500.000



DATE 02 AUG 75

1A13 SOURCE DATA

PAGE 508

1A13,SR8(S8)WITH PLUMES SEPARATING FROM 08T10

(RTJ446) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = 1000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 P101 = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -5.000 DBETA = -20.000  
 X .000 PCHE = 1500.000

RUN NO. 911/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
-1.482	399.960	-.05684	-.02473	.08438	.02074
.883	599.940	-.04733	-.02384	.08038	.01814
-1.050	799.100	-.04422	-.02148	.09207	.01509
.052	999.910	-.04366	-.01933	.09457	.01411

RUN NO. 938/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
200.660	400.120	-.04470	-.02391	.09262	.02497
200.480	600.050	-.04834	-.02080	.08598	.01975
200.040	799.960	-.04467	-.02086	.09379	.01517
200.410	1000.200	-.04634	-.01877	.09769	.01398

RUN NO. 939/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
400.596	399.940	-.04717	-.01939	.08612	.02235
400.430	599.940	-.05114	-.01770	.09727	.01694
400.280	799.880	-.04785	-.01886	.09880	.01410
400.870	999.910	-.04720	-.01815	.09952	.01348

RUN NO. 997/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
800.830	799.100	-.04627	-.01790	.10104	.01187

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ447) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XTRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YTRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZTRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -10.000 DBETA = 5.000  
 X = .000 PCMB = 1500.000

RUN NO. 873/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
.153	200.350	-.07337	-.00810	-.02756	.00048
.241	300.200	-.09525	-.01775	-.02459	.00176
.124	400.170	-.12111	-.03240	-.02598	.00390
-.540	600.180	-.11038	-.01753	-.03007	-.00132
.378	799.970	-.11280	-.01334	-.03721	-.00122
-.098	1000.300	-.10343	-.01469	-.03902	-.00110

RUN NO. 874/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
200.300	199.850	-.03690	-.01548	-.02911	.00181
200.490	300.230	-.09960	-.01662	-.02959	.00076
199.410	401.650	-.10270	-.01570	-.02999	.00053
200.140	599.980	-.10898	-.01479	-.02915	-.00288
199.800	799.920	-.10257	-.01599	-.03548	-.00173
199.870	1000.000	-.09685	-.01811	-.03889	-.00140

RUN NO. 870/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
400.510	.980	-.09225	-.02137	-.01849	-.00818
400.430	50.671	-.09376	-.02052	-.01848	-.00822
400.490	100.450	-.09450	-.02042	-.01951	-.00815
400.930	150.290	-.09556	-.02032	-.02017	-.00839
400.930	200.360	-.09762	-.01964	-.02189	-.00396
401.180	300.990	-.09688	-.01923	-.02634	-.00405
400.260	401.580	-.09544	-.01954	-.02814	-.00325
399.970	600.070	-.09821	-.01970	-.03094	-.00394
399.920	800.060	-.09572	-.01963	-.03791	-.00205
400.120	1000.000	-.09588	-.01828	-.04023	-.00137

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ448) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BRPF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PIOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -10.000 DBETA = .000  
 X = .000 PCMB = 1500.000

RUN NO. 876/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
.883	200.260	-.06648	-.00550	.00242	.00040
.104	299.960	-.07938	-.01952	.00153	.00390
-.027	399.960	-.10670	-.03359	-.00034	.00659
.088	599.900	-.08587	-.02306	-.00618	.00306
.311	799.960	-.09373	-.01858	-.00925	.00430
-.119	999.400	-.09297	-.01660	-.01042	.00470

RUN NO. 875/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
200.170	197.770	-.09251	-.02186	-.00171	.01118
200.670	299.020	-.09133	-.02088	-.00161	.00832
202.160	399.670	-.08646	-.02196	-.00145	.00520
199.850	600.160	-.08746	-.02111	-.00481	.00501
202.480	801.330	-.09228	-.01720	-.00218	.00482
201.180	999.910	-.08774	-.01878	-.00956	.00355

RUN NO. 871/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
399.740	.070	-.08283	-.02586	.01757	-.00304
399.420	40.188	-.09409	-.02552	.01597	-.00197
399.220	100.160	-.08354	-.02496	.01246	-.00091
399.220	150.160	-.08536	-.02419	.00930	-.00006
398.890	189.050	-.08708	-.02295	.00884	.00081
399.950	299.610	-.09091	-.02239	.00693	-.00021
400.780	400.130	-.08932	-.02291	.00861	.00047
399.520	600.010	-.08660	-.01987	-.00529	.00359
402.390	801.260	-.08503	-.02111	-.00954	.00397
401.350	1000.000	-.08381	-.02101	-.01183	.00430

RUN NO. 885/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
800.810	801.040	-.08386	-.02158	-.01309	.00375

(RTJ48) ( 31 JUL 75

1A13, SWS(8) WITH PLUMES SEPARATING FROM ORTIO

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOFL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -10.000 DBETA = -5.000  
 X = .000 PC4PB = 1500.000

RUN NO. 916/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
.342	600.030	-.07189	-.02672	.01782	.00872
1.418	801.590	-.07668	-.02367	.01714	.01018
.008	1000.100	-.07744	-.02104	.01290	.01119

RUN NO. 915/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
199.780	198.450	-.07648	-.02734	.03305	.01740
202.050	299.370	-.08237	-.02549	.02628	.01472
202.410	399.370	-.08058	-.02491	.01835	.01313
200.270	600.110	-.07780	-.02740	.03055	.00629
199.920	800.040	-.07813	-.02378	.02292	.00865
200.660	1000.100	-.07814	-.02162	.01510	.01018

RUN NO. 914/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
399.680	150.130	-.07255	-.02785	.02839	.00776
397.970	198.900	-.07551	-.02696	.02770	.00705
399.540	298.750	-.08151	-.02634	.03220	.00459
402.040	398.610	-.08395	-.02594	.03810	.00278
399.640	600.050	-.08009	-.02581	.03929	.00228
401.050	799.980	-.07735	-.02317	.02370	.00703
400.180	1000.200	-.07403	-.02329	.01605	.00902

RUN NO. 888/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
800.840	799.890	-.07235	-.02398	.01417	.00930

(RTJ450) ( 31 JUL 75 )

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. X5  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y5  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z5  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.960  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -10.000 DBETA = -10.000  
 X .000 PCMR = 1500.000

RUN NO. 917/ 0 RN/L = 1.74			
Y	Z	CM	CY
.408	630.140	-.03205	.04220
-.672	798.690	-.02550	.04024
-1.450	999.450	-.02412	.03918
MACH = 4.510 PTOTL = 28.960			
ALPHA = .000 BETA = 5.000			
DALPHA = -10.000 DBETA = -10.000			
X .000 PCMR = 1500.000			
RUN NO. 930/ 0 RN/L = 1.74			
Y	Z	CM	CY
200.700	400.200	-.02825	.03908
200.500	599.960	-.02814	.05073
200.510	799.970	-.02413	.04882
200.930	1000.300	-.02450	.04196
MACH = 4.510 PTOTL = 28.960			
ALPHA = .000 BETA = 5.000			
DALPHA = -10.000 DBETA = -10.000			
X .000 PCMR = 1500.000			
RUN NO. 932/ 0 RN/L = 1.74			
Y	Z	CM	CY
203.130	801.010	-.03236	.05243
200.860	1000.700	-.02846	.05167
MACH = 4.510 PTOTL = 28.960			
ALPHA = .000 BETA = 5.000			
DALPHA = -10.000 DBETA = -10.000			
X .000 PCMR = 1500.000			
RUN NO. 931/ 0 RN/L = 1.74			
Y	Z	CM	CY
399.280	298.200	-.02810	.04910
400.440	400.180	-.02337	.05107
400.440	600.020	-.02590	.05517
401.660	801.050	-.02429	.05201
401.050	1000.200	-.02568	.04283
MACH = 4.510 PTOTL = 28.960			
ALPHA = .000 BETA = 5.000			
DALPHA = -10.000 DBETA = -10.000			
X .000 PCMR = 1500.000			

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SR8(SB)WITH PLUMES SEPARATING FROM 08T10

(RTJ451) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1296.3000 INCHES YMRP = .0000 IN. YS  
 FREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 918/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
.632	599.900	-.06879	-.03004	.07782	.02198
.146	799.980	-.07137	-.02650	.07953	.02063
.695	999.980	-.06507	-.02453	.08249	.01750

RUN NO. 935/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
200.590	509.980	-.07179	-.02697	.08468	.02140
200.530	799.950	-.07816	-.02283	.08173	.01948
200.790	1000.200	-.06564	-.02380	.08956	.01586

RUN NO. 937/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
400.090	600.060	-.07337	-.02362	.08938	.01932
400.410	795.840	-.07261	-.02297	.08893	.01617
400.890	999.820	-.06532	-.02361	.09034	.01447

RUN NO. 850/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
400.440	400.160	-.06517	-.02337	.05107	.00995

1A13.SR8(SB)WITH PLUMES SEPARATING FROM 08T10

(RTJ452) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 FREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 877/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN
2.053	601.140	-.15043	-.03527	-.04480	.00218
1.055	801.370	-.18218	-.01807	-.05716	.02282
-.589	1000.500	-.19037	-.00788	-.05378	.00719

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -10.000 DBETA = -20.000  
 X = .000 PCF48 = 1500.000

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = 5.000  
 X = .000 PCF48 = 1500.000

IA13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ452) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 878/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN
200.440	600.330	-1.17375	-0.01788	-0.04943	.00388
197.170	799.710	-1.18969	-0.00888	-0.05892	.00567
198.280	999.500	-1.18324	-0.00846	-0.05919	.00555

RUN NO. 879/ 0 RN/L = 1.73

Y	Z	CN	CLM	CY	CYN
400.210	600.250	-1.17394	-0.01100	-0.05405	.00424
402.150	801.270	-1.17441	-0.01190	-0.05443	.00409
400.320	999.390	-1.17155	-0.01329	-0.05902	.00525

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = 5.000  
 X = .000 PCMB = 1500.000

IA13,SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ453) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 882/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
1.743	801.900	-1.14183	-0.02700	-0.01733	.00421
.278	1000.400	-1.14187	-0.02303	-0.01932	.00508

RUN NO. 880/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
199.830	600.290	-1.14521	-0.02625	-0.03315	.00130
203.080	800.730	-1.13787	-0.02553	-0.01416	.00386
199.690	1000.500	-1.13873	-0.02262	-0.01991	.00574

RUN NO. 881/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
399.770	600.260	-1.13184	-0.02814	-0.01304	.00451
399.830	800.270	-1.13489	-0.02358	-0.01848	.00535
397.760	999.730	-1.13453	-0.02342	-0.02120	.00596

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = .000  
 X = .000 PCMB = 1500.000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,SRB(SB)WITH PLUES SEPARATING FROM OBTIO

(RTJ-53) ( 31 JUL 75 )

## REFERENCE DATA

SREF • 2690.0000 SQ.FT. XHRP • 1167.0000 IN. XS  
 LREF • 1290.3000 INCHES YHRP • .0000 IN. YS  
 BREF • 1290.3000 INCHES ZHRP • 400.0000 IN. ZS  
 SCALE • .0100

RUN NO. 888/ 0 RN/L • 1.72

Y	Z	CN	CLM	CY	CYN
800.520	800.030	-.06268	-.02438	.09398	.01203

## PARAMETRIC DATA

MACH • 4.510 PTOTL • 28.900  
 ALPHA • .000 SE TA • 5.000  
 DALPHA • -20.000 DBETA • .000  
 X • .000 PCMB • 1500.000

## REFERENCE DATA

SREF • 2690.0000 SQ.FT. XHRP • 1167.0000 IN. XS  
 LREF • 1290.3000 INCHES YHRP • .0000 IN. YS  
 BREF • 1290.3000 INCHES ZHRP • 400.0000 IN. ZS  
 SCALE • .0100

RUN NO. 919/ 0 RN/L • 1.74

Y	Z	CN	CLM	CY	CYN
1.745	801.380	-.11771	-.03431	.01259	.00788
-.005	1000.400	-.12331	-.02682	.00934	.00750

## PARAMETRIC DATA

MACH • 4.510 PTOTL • 28.900  
 ALPHA • .000 BETA • 5.000  
 DALPHA • -20.000 CS TA • 5.000  
 X • .000 PCMB • 1500.000

RUN NO. 922/ 0 RN/L • 1.74

Y	Z	CN	CLM	CY	CYN
200.010	600.300	-.14173	-.03203	.02428	.00369
203.000	801.240	-.13442	-.02544	.01857	.00727
200.500	1000.500	-.12239	-.02652	.01071	.00718

RUN NO. 923/ 0 RN/L • 1.74

Y	Z	CN	CLM	CY	CYN
400.380	598.550	-.13418	-.02824	.04784	-.00201
400.090	800.260	-.12487	-.02685	.01919	.00592
397.700	999.920	-.11508	-.02815	.00876	.00768

RUN NO. 887/ 0 RN/L • 1.74

Y	Z	CN	CLM	CY	CYN
800.410	799.970	-.10812	-.03177	.00437	.00997

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DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(88)WITH PLUMES SEPARATING FROM 09710

(RTJ455) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2090.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 920/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
.448	800.240	-.11526	-.03951	.04470	.01100
-.720	999.080	-.12934	-.02590	.04570	.00959

RUN NO. 932/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
203.130	801.010	-.13162	-.03236	.05243	.01121
200.860	1000.700	-.12725	-.02846	.05167	.00755

RUN NO. 933/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
401.510	798.110	-.14363	-.02291	.06726	.00514
397.240	999.620	-.11824	-.02867	.05286	.00608

RUN NO. 934/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
800.120	800.000	-.10336	-.03426	.04402	.00838

1A13.SRB(59)WITH PLUMES SEPARATING FROM 09710

(RTJ456) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2090.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 921/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
1.442	802.310	-.12375	-.03006	.08126	.01702
-.521	999.080	-.12926	-.01937	.08004	.01562

RUN NO. 935/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
200.500	800.240	-.11784	-.03175	.06643	.01807
200.050	999.280	-.13764	-.01580	.06733	.01352

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = -10.000  
 X = .000 PCMR = 1500.000

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = -20.000  
 X = .000 PCMR = 1500.000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13, SR8(SB) WITH PLUMES SEPARATING FROM ORTIO

(RTJ456) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 50.FT. XRRP = 1167.0000 IN. X3  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. Y5  
 BRPF = 1290.3000 INCHES ZRRP = 400.0000 IN. Z5  
 SCALE = .0100

RUN NO. 934/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
403.800	802.440	-.12992	-.02563	.09711	.01752
399.170	1000.700	-.14026	-.01298	.09601	.01026

RUN NO. 895/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
903.420	800.000	-.11864	-.01927	.10292	.00462

1A13 SR8(SB) W/O PLUMES SEPARATING FROM ORTIO

(RTJ457) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 50.FT. XRRP = 1167.0000 IN. X5  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. Y5  
 BRPF = 1290.3000 INCHES ZRRP = 400.0000 IN. Z5  
 SCALE = .0100

RUN NO. 945/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
10.254	.098	-.02752	.00088	-.01575	.00728
10.033	50.153	-.02521	-.00013	-.01967	.00607
10.156	102.100	-.02439	-.00171	-.01858	.00545
10.992	150.150	-.02408	-.00442	-.01497	.00802
10.139	200.250	-.02596	-.00301	-.01159	.00597
9.885	299.950	-.02356	-.00666	-.01296	.00228
9.475	399.490	-.01799	-.00350	-.01790	-.00103
10.338	599.630	-.01896	.00058	-.01796	-.00079
10.473	799.660	-.01470	.00085	-.01248	-.00444
8.825	999.880	-.00941	-.00157	-.01612	-.00265

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = -20.000 DBETA = -20.000  
 X = .000 PCMPB = 1503.000

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = .000  
 X = .000 PCMPB = .000

1A13 SRB(SB) W/O PLUNES SEPARATING FROM 09T10

(RTJ458) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. X8  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y5  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z5  
 SCALE = .0100

RUN NO. 944/ 0 RN/L = 1.74

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = 5.000  
 DALPHA = .000 DBETA = 5.000  
 X = .000 PCMRB = .000

Y	Z	CN	CLM	CY	CYN
.475	-.116	-.02392	.00329	-.03147	-.00330
.179	49.714	-.02384	.00109	-.03484	-.00440
.205	99.659	-.02232	-.00242	-.03743	-.00337
.307	149.720	-.02640	-.00513	-.03684	-.00101
1.167	200.290	-.02986	-.00860	-.03540	-.00014
.559	300.580	-.02527	-.00726	-.04449	-.00305
.140	400.430	-.01904	-.00326	-.04380	-.00224
.078	599.980	-.01639	.00088	-.04786	-.00311
.226	799.900	-.01261	-.00096	-.04821	-.00455
.371	998.440	-.01182	-.00087	-.04908	-.00394

1A13 SRB(SB) WITH PLUNES SEPARATING FROM 09T10

(RTJ459) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. X8  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y5  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z5  
 SCALE = .0100

RUN NO. 1041/ 0 RN/L = 1.76

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = 5.000 DBETA = 5.000  
 X = .000 PCMRB = 1500.000

Y	Z	CN	CLM	CY	CYN
.119	.008	-.00072	-.00688	-.00133	-.00603
.344	49.810	.00261	-.00313	.00142	-.00723
-.857	97.941	.00837	.00088	-.00079	-.00532
-.270	150.340	.01326	.00280	.00146	-.00420
-.303	200.040	.01582	.00198	.00153	-.00261
2.803	298.550	.00091	-.01028	.01954	.00899
.057	400.180	-.01167	-.02015	.02736	.01339
-.146	600.140	-.00507	-.00584	.02072	.00463

DATE 02 AUG 75

IA13 SOURCE DATA

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(RTJ459) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1042/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
203.350	.670	.00083	-.00724	.03478	.01323
201.490	50.976	.00050	-.00957	.03452	.01393
201.230	100.420	-.00149	-.01178	.03316	.01458
200.040	150.480	-.00185	-.01250	.03038	.01421
200.150	200.810	.00024	-.01163	.02692	.01282
198.760	300.270	.00685	-.00724	.02390	.00917
199.640	400.490	.00381	-.00734	.02254	.00042
200.340	599.830	-.00130	-.00552	.02074	.00363

RUN NO. 1043/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
400.160	.291	.01085	-.00698	.02171	.00601
400.720	49.904	.01042	-.00708	.02215	.00519
400.330	99.522	.01013	-.00708	.02184	.00597
401.100	149.150	.00874	-.00703	.02078	.00618
400.110	198.150	.00738	-.00644	.01977	.00620
400.220	247.420	.00383	-.00599	.02022	.00482
402.360	399.150	.00020	-.01487	.02124	.00360
399.910	598.760	.00029	-.00551	.01797	.00366

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = 5.000 DBETA = 5.000  
 X = .000 PCHFF = 1500.000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ460) ( 31 JUL 75 )

## REFERENCE DATA

SRF = 2890.0000 SQ.FT. XMRP = 1167.0000 IN. X5  
 LRF = 1290.3000 INCHES YMRP = .0000 IN. Y5  
 BRP = 1290.3000 INCHES ZMRP = 400.0000 IN. Z5  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = 5.000 DBETA = .000  
 X = .000 PCMB = 1500.000

RUN NO. 1046/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
-.371	-.033	-.00016	-.00868	.02310	-.00142
.839	50.095	.00636	-.00547	.02295	-.00333
2.481	101.650	.01073	-.00012	.02583	-.00876
.094	149.850	.01213	.00220	.02138	-.00541
-.112	199.710	.01012	.00377	.02672	-.00328
.159	299.660	-.00384	-.00920	.04308	.01404
-2.123	401.120	-.01395	-.02243	.05602	.02005
.167	599.930	-.00745	-.00775	.04964	.01215

RUN NO. 1045/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
200.860	-.578	-.00303	-.00703	.07415	.02580
199.540	49.509	-.00392	-.01070	.07120	.02617
199.920	99.354	-.00371	-.01204	.07103	.02781
200.120	149.260	-.00287	-.01179	.06840	.02787
201.690	198.680	-.00526	-.01271	.06195	.02504
201.750	300.510	.00340	-.01039	.05704	.01844
200.630	399.930	-.00175	-.00705	.05575	.01323
200.290	601.710	-.00829	-.00818	.05281	.01043

RUN NO. 1044/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
403.310	-.228	.00330	-.00872	.05586	.01400
400.230	50.040	.00387	-.00705	.05281	.01492
401.080	100.370	.00336	-.00722	.05250	.01519
400.760	150.620	.00372	-.00747	.05393	.01422
400.700	200.640	.00334	-.00762	.05443	.01343
400.730	300.790	-.00014	-.00707	.05432	.01202
400.550	400.680	-.00351	-.00681	.05349	.01062
398.430	600.250	-.00645	-.00637	.05098	.00984

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM ORTIO

(RTJ461) JUL 75

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = 5.000 DBETA = -5.000  
 X = .000 PCURV = 1500.000

RUN NO. 1091/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
.641	400.550	-.02345	-.02224	.09362	.02520
.199	599.730	-.01079	-.00719	.07861	.01342

RUN NO. 1094/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
200.130	-1.008	-.00743	-.00928	.10807	.03152
199.360	50.901	-.00809	-.01128	.10293	.02990
199.690	97.537	-.00503	-.01156	.10595	.02938
200.100	148.320	-.00872	-.01273	.10552	.03071
200.570	199.710	-.01089	-.01435	.10821	.02994
200.940	300.280	-.01028	-.01359	.08848	.02543
200.640	399.030	-.00334	-.00559	.09194	.01810
200.600	599.810	-.00890	-.00598	.08579	.01292

RUN NO. 1095/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
400.170	2.250	-.00204	-.00478	.09429	.01523
400.750	48.372	-.00179	-.00533	.09057	.01620
400.520	100.240	-.00015	-.00649	.08527	.01877
400.550	150.720	.00066	-.00693	.08318	.01335
400.600	202.510	-.00010	-.00572	.08453	.01863
400.460	300.550	-.00131	-.00570	.08565	.01682
399.510	399.290	-.00474	-.00503	.08591	.01447
398.070	601.340	-.00850	-.00589	.08667	.01142

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ462) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1082/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
3.038	398.430	-.02202	-.01055	.13210	.02731
1.375	599.970	-.01267	-.00558	.11977	.01805

RUN NO. 1115/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
200.490	201.230	-.00335	-.01629	.13539	.03325
200.240	300.830	-.01345	-.01548	.13809	.02465
200.450	399.430	-.00087	-.00654	.13273	.01663
201.020	599.890	-.00724	-.00536	.12376	.01250

RUN NO. 1114/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
399.140	.187	-.00157	-.00459	.12646	.02055
399.450	49.640	-.00107	-.00494	.12968	.01842
400.410	99.041	-.00121	-.00468	.13086	.01708
400.170	148.520	.00047	-.00578	.12840	.01757
399.410	159.490	.00277	-.00583	.12668	.01742
401.190	296.480	-.00080	-.00588	.12851	.01589
400.180	401.600	-.00388	-.00508	.12905	.01351
401.200	601.030	-.00524	-.00546	.12563	.01084

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = 5.000 DBETA = -10.000  
 X = .000 PCH4B = 1500.000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1091/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
.883	397.100	-.00482	-.01808	.21918	.02055
.365	600.120	-.00810	-.00702	.21303	.00608

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = 5.000 DBETA = -20.000  
 X = .000 PCH4B = 1500.000

1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ463) ( 31 JUL 75 )

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IA13 SOURCE DATA

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IA13,SRB(SB)WITH PLUMES SEPARATING FROM ORTIO

(RTJ-63) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2650.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1230.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1132/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
200.420	398.490	.00189	-.01195	.22726	.01844
200.790	599.650	-.00254	-.00568	.21196	.00863

RUN NO. 1133/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
400.980	200.240	.01695	-.01033	.21806	.01587
401.480	300.430	.01060	-.00953	.24817	-.00252
403.120	398.940	-.00623	-.00233	.23419	.00237
401.550	597.460	-.00084	-.00479	.21770	.00593

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = 5.000 DBETA = -20.000  
 X = .000 PC448 = 1500.000

## REFERENCE DATA

SREF = 2650.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1047/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
-.170	-.087	-.01728	-.00750	-.00034	-.00403
.370	50.039	-.01268	-.00456	.00139	-.00429
-1.801	88.074	-.00422	-.00125	.00405	-.00624
.228	147.380	-.00163	.00031	.00501	-.00859
.245	200.510	-.00233	.00094	.00762	-.00484
-.865	300.110	-.01902	-.00978	.01310	.00514
.275	400.140	-.03953	-.02725	.02669	.01347
.358	599.940	-.02650	-.01693	.01901	.00676
.192	799.840	-.02632	-.01411	.01853	.00547
-.107	999.890	-.02321	-.01288	.01878	.00491

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = .000 DBETA = 5.000  
 X = .000 PC448 = 1500.000

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 OF POOR QUALITY



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IA13 SOURCE DATA

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IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJAB+) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = .000 DBETA = 5.000  
 X = .000 PCMB = 1500.000

RUN NO. 1048/ 0 RM/L = 1.76

Y	Z	CN	CLM	CY	CYN
200.450	-0.013	-0.03012	-0.01080	.02883	.01788
202.090	50.980	-0.03081	-0.01280	.02949	.01993
201.120	100.840	-0.03082	-0.01530	.02913	.01991
200.180	150.650	-0.02809	-0.01723	.02682	.01725
201.080	200.760	-0.02545	-0.01726	.02309	.01525
198.620	301.130	-0.02143	-0.01494	.01950	.01218
198.930	400.580	-0.02257	-0.01432	.01780	.00889
200.900	599.890	-0.02503	-0.01372	.01980	.00515
198.510	799.520	-0.02526	-0.01413	.01868	.00526
199.390	998.500	-0.02282	-0.01258	.01658	.00463

RUN NO. 1049/ 0 RM/L = 1.76

Y	Z	CN	CLM	CY	CYN
400.380	.025	-0.01994	-0.00998	.01981	.00554
400.070	49.804	-0.01914	-0.01076	.01843	.00652
400.580	99.495	-0.01848	-0.01186	.01815	.00795
400.070	149.290	-0.01848	-0.01223	.01421	.00880
400.170	198.750	-0.01879	-0.01244	.01394	.00870
400.220	299.570	-0.02129	-0.01329	.01552	.00759
401.890	399.180	-0.02320	-0.01363	.01879	.00533
402.020	600.220	-0.02563	-0.01383	.01857	.00551
401.560	801.080	-0.02509	-0.01385	.01726	.00519
399.470	999.030	-0.02164	-0.01323	.01543	.00477

RUN NO. 1071/ 0 RM/L = 1.76

Y	Z	CN	CLM	CY	CYN
800.000	800.350	.02571	-.02555	-.02505	.00735

DATE 02 AUG 75

1A13 SOURCE DATA

1A13.SRB(SB)WITH PLUCKS SEPARATING FROM 09T10

(RTJ485) 11 JUL 75

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 DREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1052/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
199.910	-.951	-.03383	-.01184	.06087	.03956
199.890	49.402	-.03221	-.01459	.05540	.02995
199.450	99.576	-.03379	-.01724	.05643	.03076
200.100	149.290	-.03049	-.01605	.05952	.02974
201.950	199.570	-.03083	-.01595	.05690	.02626
200.760	300.420	-.02046	-.01668	.04857	.01891
200.390	399.980	-.02150	-.01388	.04577	.01456
202.710	600.590	-.02721	-.01482	.04000	.00996
201.440	801.520	-.02823	-.01422	.04111	.01187
200.820	1000.700	-.02578	-.01253	.03981	.01308

RUN NO. 1051/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
199.910	-.951	-.03383	-.01184	.06087	.03956
199.890	49.402	-.03221	-.01459	.05540	.02995
199.450	99.576	-.03379	-.01724	.05643	.03076
200.100	149.290	-.03049	-.01605	.05952	.02974
201.950	199.570	-.03083	-.01595	.05690	.02626
200.760	300.420	-.02046	-.01668	.04857	.01891
200.390	399.980	-.02150	-.01388	.04577	.01456
202.710	600.590	-.02721	-.01482	.04000	.00996
201.440	801.520	-.02823	-.01422	.04111	.01187
200.820	1000.700	-.02578	-.01253	.03981	.01308

RUN NO. 1050/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
401.900	-.106	-.02739	-.00829	.05354	.01162
400.080	50.030	-.02631	-.00844	.04865	.01347
400.790	100.400	-.02353	-.00992	.04648	.01431
401.210	150.470	-.02070	-.01148	.04485	.01492
400.320	200.550	-.01990	-.01234	.04397	.01511
400.460	301.390	-.02235	-.01291	.04411	.01415
400.000	400.670	-.02473	-.01359	.04499	.01221
398.310	600.620	-.02747	-.01405	.04467	.01047
397.900	799.750	-.02733	-.01345	.04001	.01241
399.190	999.580	-.02483	-.01223	.04055	.01258

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -.5000  
 DALPHA = .000 DBETA = .000  
 X .000 PCHHT = 1500.000

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ465) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1078/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
800.110	801.360	-.02198	-.01492	.01408	.00415

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = .000 DBETA = .000  
 X = .000 PCH#B = 1500.000

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ466) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1088/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
.731	399.040	-.03871	-.02415	.07892	.02447
.956	600.470	-.02788	-.01428	.07411	.01140
.858	801.470	-.02939	-.01257	.07598	.01025
.318	1000.100	-.02538	-.01296	.07236	.01292

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = .000 DBETA = -5.000  
 X = .000 PCH#B = 1500.000

RUN NO. 1098/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
200.500	-3.037	-.03562	-.01268	.08575	.03818
200.250	51.071	-.03631	-.01725	.08194	.03710
199.520	99.052	-.03493	-.01914	.07998	.03677
199.770	149.550	-.03422	-.01937	.09196	.03200
200.700	197.580	-.03422	-.01948	.10223	.02690
202.560	299.580	-.03801	-.01842	.09205	.02211
200.520	399.020	-.02297	-.01382	.08184	.01535
203.810	599.000	-.02815	-.01341	.07658	.01212
202.420	801.110	-.02783	-.01295	.07775	.00910
200.870	1001.000	-.02688	-.01224	.07341	.01291

DATE 02 AUG 75

IA13 SOURCE DATA

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(RTJN65) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XRRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1097/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
400.460	.870	-.02965	-.00883	.08369	.01659
400.920	49.578	-.02860	-.00905	.08930	.01438
400.500	100.310	-.02774	-.00891	.08713	.01341
400.250	153.200	-.02532	-.00973	.08266	.01471
400.320	201.310	-.02285	-.01137	.08220	.01469
400.320	249.140	-.02353	-.01175	.08273	.01338
400.180	403.630	-.02613	-.01195	.08284	.01193
398.510	595.060	-.02698	-.01310	.07854	.01051
397.840	802.390	-.02785	-.01237	.07731	.00952
398.670	1000.100	-.02395	-.01250	.07415	.01236

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = .000 DBETA = -5.000  
 X = .000 PCHRB = 1500.000

RUN NO. 1078/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
801.540	797.590	-.02282	-.01321	.07394	.01106

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XRRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1101/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
2.012	402.050	-.04032	-.02101	.11371	.02286
.869	596.880	-.02554	-.01363	.10221	.01284
.109	800.300	-.02635	-.01109	.11209	.00900
.528	1000.300	-.02534	-.01106	.10958	.01030

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = .000 DBETA = -10.000  
 X = .000 PCHRB = 1500.000

(RTJN67) ( 31 JUL 75 )

DATE 02 AUG 75

1A13 SOURCE DATA

PAGE 029

1A13,SRB(SB)WITH PLUMES SEPARATING FROM 0910

(RTJ467) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LRE = 1290.3000 INCHES YPRP = .0000 IN. YS  
BRE = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = .000 DBETA = -10.000  
X = .000 PCMB = 1500.000

RUN NO. 1116/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
199.930	200.830	-.02913	-.02014	.11043	.03578
200.770	303.470	-.03449	-.02174	.12899	.02594
200.420	401.070	-.02345	-.01202	.11565	.01554
200.870	599.970	-.02746	-.01248	.11031	.01312
202.010	801.720	-.02567	-.01190	.11434	.00797
200.950	1001.500	-.02509	-.01095	.11067	.00935

RUN NO. 1117/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
399.770	-.667	-.02867	-.00869	.11158	.02362
400.320	49.596	-.02590	-.00978	.11514	.02086
399.880	99.151	-.02174	-.01072	.11160	.01933
400.140	149.160	-.02059	-.01097	.11651	.01628
400.160	197.540	-.02072	-.01082	.12065	.01397
401.670	299.820	-.02198	-.01086	.12417	.01143
402.620	400.250	-.02163	-.01157	.11811	.01235
402.210	597.610	-.02496	-.01211	.11609	.01019
401.720	801.870	-.02625	-.01190	.11575	.00749
400.170	1002.500	-.02344	-.01085	.11031	.00893

RUN NO. 1086/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
801.270	798.690	-.02474	-.01034	.11267	.00783

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM DBT10

(RTJ488) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1102/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
.529	398.180	-.01578	-.01334	.17272	.01699
.623	600.150	-.02907	-.01206	.20721	.00608
1.050	798.170	-.02870	-.00814	.20501	.00371
-.033	898.710	-.02191	-.00944	.20012	.00574

RUN NO. 1131/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
188.960	400.260	-.02545	-.02094	.21086	.02051
200.280	599.970	-.02473	-.01094	.20359	.01048
200.010	799.570	-.02645	-.00801	.20702	.00313
200.290	1000.000	-.02137	-.00900	.19903	.00531

RUN NO. 1130/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
401.250	300.750	-.00935	-.01449	.20558	.01441
400.430	399.650	-.01892	-.01056	.23166	-.00063
400.740	602.000	-.02604	-.00808	.20674	.00872
401.980	801.100	-.02629	-.00804	.21040	.00170
400.710	1000.400	-.02179	-.00875	.20041	.00443

RUN NO. 1087/ 0 RN/L = 1.72

Y	Z	CN	CLM	CY	CYN
800.640	800.330	-.02621	-.00788	.21110	.00030

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -.5.000  
 DALPHA = .000 DBETA = -20.000  
 X = .000 PC1#B = 1500.000

IA13.BRG(68)WITH PLUMES SEPARATING FROM 09T10

(RTJ489) (21 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1167.0000 IN. X5  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y5  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z5  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -5.000 DBETA = 5.000  
 X = .000 PCPRG = 1500.000

RUN NO. 1053/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
.397	50.093	-.02502	-.00615	.00229	-.00023
-1.971	98.259	-.01798	-.00301	.00187	-.00144
.065	147.260	-.01492	-.00084	.00226	-.00221
.547	200.520	-.01794	-.00105	.00405	-.00117
.290	300.270	-.03396	-.01317	.01423	.00399
.480	400.290	-.06509	-.031E1	.02431	.01207
-.134	600.020	-.04752	-.02318	.02094	.00646
.095	799.910	-.04923	-.02010	.02074	.00671
.005	1000.200	-.04602	-.02001	.01896	.00599

RUN NO. 1054/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
200.990	50.314	-.05812	-.01854	.02279	.02141
200.690	100.900	-.05501	-.02101	.02279	.01993
201.110	150.510	-.05309	-.02261	.02261	.01891
201.510	201.090	-.05247	-.02272	.02131	.01847
199.520	301.670	-.04591	-.02081	.01444	.01348
198.420	401.830	-.04479	-.02204	.01508	.00964
200.040	599.870	-.04932	-.02067	.01929	.00690
197.880	799.970	-.04820	-.02045	.02189	.00548
198.610	998.770	-.04463	-.02030	.01886	.00516

RUN NO. 1057/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
199.720	.030	-.04587	-.01826	.02514	.00351
400.140	49.761	-.04556	-.01842	.02306	.00460
400.440	99.503	-.04622	-.01829	.02132	.00562
399.900	149.340	-.04584	-.01843	.01956	.00673
399.600	198.870	-.04502	-.01910	.01877	.00777
400.200	299.240	-.04528	-.02002	.01971	.00638
402.150	399.440	-.04579	-.02052	.02013	.00650
402.370	600.130	-.04819	-.02063	.02152	.00577
402.50	801.910	-.04735	-.02093	.02092	.00546
400.610	1002.000	-.04577	-.02034	.01797	.00512

RUN NO. 1072/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
800.640	799.970	-.04801	-.02133	.01835	.00401

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ-70) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.500  
 ALPHA = .000 BETA = -5.000  
 DIALPHA = -5.000 DBETA = .000  
 X = .000 PCFHB = 1500.000

RUN NO. 1058/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
.906	50.122	-.01879	-.00917	.01690	.00684
.528	100.010	-.01422	-.00598	.01630	.00247
.266	150.040	-.01231	-.00343	.01081	.00019
.208	199.500	-.01128	-.00431	.01176	.00053
.362	299.760	-.02662	-.01496	.02439	.00967
.814	399.860	-.05583	-.02759	.04190	.01825
.175	599.780	-.05102	-.02208	.03847	.01337
-1.009	798.610	-.05278	-.01913	.03914	.01238
-.423	998.590	-.04930	-.01899	.03643	.01715

RUN NO. 1055/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
200.050	48.044	-.04702	-.02205	.04595	.02822
198.680	99.448	-.05201	-.02382	.04698	.02867
199.170	149.130	-.05436	-.02582	.05053	.02949
201.620	198.750	-.05620	-.02535	.05031	.02860
200.800	299.570	-.04774	-.02022	.04014	.02164
202.220	400.190	-.04105	-.02189	.03621	.01617
201.830	600.270	-.04452	-.02268	.04122	.01165
201.410	801.270	-.05133	-.01953	.03955	.01148
201.620	1000.300	-.04689	-.01979	.03742	.01233

RUN NO. 1060/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
400.040	-1.278	-.04560	-.01771	.04961	.00945
401.340	51.007	-.04847	-.01751	.04773	.01040
401.120	99.229	-.04588	-.01753	.04410	.01200
401.300	151.840	-.04587	-.01779	.04137	.01318
401.200	199.590	-.04568	-.01786	.04042	.01327
400.350	302.700	-.04467	-.01931	.03965	.01312
400.140	399.620	-.04400	-.02058	.03993	.01240
397.710	600.110	-.04572	-.02126	.03916	.01099
397.960	802.220	-.04739	-.02039	.03801	.01137
398.970	996.770	-.04448	-.02009	.03689	.01209

RUN NO. 1077/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
800.180	798.160	-.04428	-.02122	.03788	.01068



DATE 02 AUG 75

1A13 SOURCE DATA

(RTJ471) (31 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -5.000 DBETA = -5.000  
 X = .000 PC4PB = 1500.000

RUN NO. 1099/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
-633	399.320	-0.04682	-0.02806	.07376	.01714
.435	601.290	-0.04607	-0.02149	.06727	.01387
-.691	797.520	-0.05417	-0.01899	.06436	.01448
.400	1001.800	-0.04956	-0.01840	.06532	.01211

RUN NO. 1104/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
199.350	50.804	-0.04682	-0.02420	.06695	.03596
198.930	99.797	-0.04933	-0.02598	.06849	.03743
199.310	148.560	-0.05307	-0.02691	.07260	.03632
200.350	201.100	-0.05336	-0.02739	.07705	.03293
202.600	301.430	-0.05625	-0.02549	.08044	.02559
200.790	400.130	-0.04351	-0.01960	.06729	.01586
200.540	599.390	-0.04556	-0.01973	.06700	.01260
200.680	799.430	-0.04990	-0.01829	.06787	.01127
199.810	997.880	-0.04605	-0.01907	.06859	.01021

RUN NO. 1105/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
399.170	.330	-0.04835	-0.01557	.07318	.01612
399.680	48.116	-0.04730	-0.01596	.07118	.01580
399.100	101.730	-0.04818	-0.01613	.06939	.01549
399.650	147.170	-0.04543	-0.01642	.07058	.01408
398.630	197.820	-0.04464	-0.01651	.07169	.01321
400.910	300.680	-0.04303	-0.01782	.07155	.01255
401.120	400.660	-0.04125	-0.01964	.06866	.01278
399.850	596.130	-0.04385	-0.02006	.06916	.01074
402.090	802.710	-0.04502	-0.01898	.06972	.00981
400.010	999.330	-0.04410	-0.01502	.07013	.00918

RUN NO. 1080/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
799.960	801.890	-0.02446	-0.01345	.04044	.01138

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13,SR8(SB)WITH PLUMES SEPARATING FROM 08T10

(RTJ472) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XHRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YHRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZHRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1100/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
.591	400.050	-.04638	-.02474	.09926	.01785
1.533	802.280	-.04190	-.02069	.09051	.01625
.822	799.680	-.04035	-.01824	.09281	.01435
.589	998.080	-.03985	-.01757	.09320	.01309

RUN NO. 1119/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
200.420	209.220	-.04997	-.03115	.10434	.03056
202.420	400.450	-.03960	-.01895	.09719	.01683
200.460	599.820	-.04112	-.01807	.08592	.01873
202.100	799.080	-.04001	-.01810	.09314	.01418
201.160	1001.700	-.03838	-.01766	.09427	.01254

RUN NO. 1118/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
399.670	49.854	-.04523	-.01469	.09386	.02487
399.710	100.530	-.04697	-.01432	.09675	.02243
399.280	147.600	-.04833	-.01356	.10057	.01977
400.330	200.810	-.04930	-.01237	.10359	.01744
401.220	298.310	-.04001	-.01628	.09588	.01934
402.080	399.280	-.03923	-.01694	.09479	.01800
402.140	600.220	-.03823	-.01748	.09368	.01544
402.050	801.500	-.03660	-.01812	.09432	.01337
401.240	1000.000	-.03505	-.01676	.09486	.01183

RUN NO. 1085/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
800.680	799.070	-.04031	-.01680	.09777	.01072

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -5.000 DBETA = -10.000  
 X = .000 PCFHB = 1500.000

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DATE 02 AUG 75

IA13 SOURCE DATA

PAGE 534

IA13.SRB(S)WITH PLUMES SEPARATING FROM 09T10

(RTJ473) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1103/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
-2.456	401.880	-.03042	-.01228	.14204	.01249
-1.847	800.950	-.03255	-.02048	.14907	.02109
.478	798.940	-.03450	-.01562	.16360	.01523
-.751	1000.300	-.03314	-.01552	.16847	.01215

RUN NO. 1128/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
200.310	398.820	-.04542	-.02592	.17140	.03231
199.770	500.000	-.03238	-.01805	.15287	.02189
199.720	798.510	-.03551	-.01508	.18720	.01471
201.320	999.960	-.03392	-.01554	.16752	.01191

RUN NO. 1129/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
399.680	399.730	-.02584	-.01941	.18198	.02418
400.970	600.570	-.03428	-.01547	.16137	.01978
401.160	800.290	-.03639	-.01500	.16923	.01348
397.880	997.450	-.03378	-.01519	.16757	.01173

RUN NO. 1088/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
799.450	802.480	-.04255	-.01917	.06958	.00814

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -5.000 DBETA = -20.000  
 X .000 PCMB = 1500.000

DATE 02 AUG 75

IA13 SOURCE DATA

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(RTJN74) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -10.000 DBETA = 5.000  
 X .000 PCHMB = 1500.000

RUN NO. 1061/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
.642	204.240	-.02908	-.00408	-.00154	.00189
.346	300.250	-.04559	-.01298	.00776	.00513
-.014	400.640	-.07915	-.03121	.01667	.01324
2.022	600.980	-.08381	-.02810	.02095	.00681
1.173	801.080	-.06921	-.02304	.01830	.00841
.018	1000.900	-.07075	-.02050	.01263	.00980

RUN NO. 1062/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
200.610	201.240	-.07978	-.02729	.02367	.02225
199.550	300.030	-.06956	-.02689	.01629	.01611
197.860	400.320	-.06556	-.02616	.01305	.01204
197.700	600.310	-.06952	-.02401	.01759	.00748
198.100	799.370	-.07068	-.02229	.01914	.00734
198.380	1000.200	-.07043	-.02044	.01288	.00896

RUN NO. 1058/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
400.940	.714	-.06324	-.02483	.02291	.00559
400.440	50.340	-.06451	-.02450	.02135	.00666
401.050	100.570	-.06522	-.02379	.01995	.00750
400.530	150.810	-.06623	-.02286	.01829	.00820
400.450	200.810	-.06703	-.02227	.01644	.00853
400.910	301.300	-.06669	-.02266	.01529	.00877
399.570	401.670	-.06732	-.02288	.01577	.00827
398.430	600.540	-.07028	-.02324	.02012	.00618
399.010	800.150	-.07014	-.02178	.01673	.00754
399.510	999.200	-.06861	-.02111	.01227	.00812

RUN NO. 1073/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
800.680	801.830	-.06928	-.02257	.01178	.00715

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJ475) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LRL' = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -10.000 DBETA = .000  
 X .000 PCH#B = 1500.000

RUN NO. 1064/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
.414	201.010	-.02301	-.00443	.01271	.00009
.045	300.390	-.03261	-.01552	.01900	.00638
-.144	401.600	-.06540	-.03284	.02929	.01795
.222	597.850	-.06792	-.02931	.03958	.01271
-1.655	800.580	-.07025	-.02432	.04099	.01152
-.270	996.960	-.06908	-.02286	.03832	.01197

RUN NO. 1063/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
200.110	196.980	-.07288	-.03315	.05223	.02938
202.580	299.290	-.06897	-.03173	.05030	.02355
200.450	402.280	-.05697	-.02732	.03742	.01560
201.830	598.320	-.06303	-.02742	.04302	.01092
201.830	803.040	-.06752	-.02530	.04306	.01051
201.210	999.810	-.06585	-.02402	.03940	.01124

RUN NO. 1059/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
399.840	1.088	-.05854	-.02622	.04546	.01101
399.420	48.652	-.05904	-.02644	.04328	.01227
399.770	101.570	-.05988	-.02647	.03842	.01428
399.920	147.170	-.06073	-.02557	.03420	.01562
399.370	199.740	-.06226	-.02485	.03271	.01619
400.240	299.430	-.06017	-.02576	.03231	.01586
400.410	399.060	-.05917	-.02692	.03264	.01500
401.930	599.740	-.06292	-.02645	.04139	.01050
402.170	801.260	-.06609	-.02534	.04299	.00976
401.000	1000.200	-.06334	-.02446	.03811	.01090

RUN NO. 1076/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
799.980	797.950	-.06105	-.02553	.03935	.00974

DATE 02 AUG 75

1A13 SOURCE DATA

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(RTJN761 ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2580.0000 SQ.FT. XMRP = 1157.0000 IN. X\$  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y\$  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z\$  
 SCALE = .0100

RUN NO. 1108/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
1.997	598.800	-.06732	-.02900	.06005	.01716
1.217	802.980	-.07384	-.02305	.05817	.01743
.785	1000.300	-.07128	-.02174	.05806	.01658

RUN NO. 1107/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
200.590	197.720	-.06816	-.03279	.06619	.03461
200.330	302.110	-.06923	-.03564	.07177	.03083
200.400	401.940	-.05962	-.02442	.05347	.02175
198.880	599.830	-.06724	-.02479	.06050	.01617
201.720	800.790	-.07218	-.02312	.06223	.01518
200.080	1002.000	-.06805	-.02308	.05817	.01529

RUN NO. 1108/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
399.270	151.570	-.05749	-.02413	.05799	.01844
399.080	198.040	-.05784	-.02410	.05806	.01738
398.780	300.170	-.05645	-.02499	.05584	.01668
401.370	396.550	-.05648	-.02557	.05485	.01709
400.160	599.950	-.05913	-.02612	.05948	.01554
402.160	804.410	-.05578	-.02387	.06191	.01403
400.180	1001.500	-.06295	-.02407	.05877	.01447

RUN NO. 1081/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
800.050	801.770	-.05781	-.02575	.06249	.01213

## PARAMETRIC DATA

MAC: = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -10.000 DBETA = -5.000  
 X = .000 PCMB = 1500.000

ORIGINAL PAGE IS  
 OF POOR QUALITY

DATE 02 AUG 75

1A13 SOURCE DATA

(RTJN77) ( JUL 75 )

1A13, 888 (88) WITH PLUMES SEPARATING FROM 08110

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XRRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. ZS  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -10.000 DBETA = -10.000  
 X = .000 PCF#B = 1500.000

RUN NO. 1109/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
1.237	600.520	-.06034	-.02730	.08254	.01944
.020	799.840	-.08718	-.02372	.08025	.01872
-.017	1002.700	-.08228	-.02213	.08047	.01635

RUN NO. 1120/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
200.750	401.790	-.04635	-.03036	.07292	.02364
200.520	601.740	-.06078	-.02423	.08242	.01855
202.440	801.110	-.06222	-.02319	.08311	.01665
200.820	1000.100	-.05817	-.02235	.08299	.01454

RUN NO. 1121/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
400.150	298.040	-.06309	-.01813	.08283	.02108
401.220	397.910	-.06257	-.01872	.07870	.02063
402.500	599.090	-.05684	-.02214	.08609	.01544
403.000	800.510	-.05871	-.02265	.08539	.01432
400.670	998.110	-.05607	-.02283	.08485	.01349

RUN NO. 1084/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
600.030	798.480	-.05441	-.02309	.08723	.01834

DATE 02 AUG 75 1A13 SOURCE DATA

1A13,SP8(SB)WITH PLUMES SEPARATING FROM 09T10 (RT-JA78) (31 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 1126/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
200.700	600.740	-.06598	-.01278	.14584	.01473
202.180	801.740	-.05922	-.01441	.14071	.01798
201.260	1000.800	-.05713	-.01339	.13789	.01634

RUN NO. 1127/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
399.980	598.930	-.05753	-.01530	.14298	.01945
400.230	800.350	-.06063	-.01300	.14524	.01562
398.560	998.970	-.05687	-.01397	.14047	.01580

RUN NO. 1089/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
401.220	397.910	-.06257	-.01872	.07870	.02063

1A13,SP8(SB)WITH PLUMES SEPARATING FROM 09T10

(RT-JA79) (31 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 1085/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
2513	801.690	-.10357	-.04265	.01390	.01023
.699	801.120	-.11365	-.03139	.01178	.00655
.045	1000.900	-.11352	-.02870	.00928	.00617

RUN NO. 1066/ 0 RN/L = 1.78

Y	Z	CN	CLM	CY	CYN
202.170	598.050	-.10728	-.03217	.01793	.00838
187.580	800.820	-.10772	-.03017	.01117	.00733
188.380	993.110	-.10828	-.02832	.00672	.00720

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -10.000 DBETA = -20.000  
X = .000 PCMB = 1500.000

PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
ALPHA = .000 BETA = -5.000  
DALPHA = -20.000 DBETA = 5.000  
X = .000 PCMB = 1500.000



DATE 02 AUG 75

IA13 SOURCE DATA

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IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09110

(RTJ479) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2090.0000 SQ.FT. XRRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1067/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
402.070	598.140	-1.0450	-.03119	.01107	.00800
401.860	800.800	-.10532	-.02988	.00881	.00831
399.740	1000.600	-.10603	-.02757	.00318	.00853

RUN NO. 1074/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
799.990	801.680	-.10455	-.02972	.00059	.00773

IA13.SRB(SB)WITH PLUMES SEPARATING FROM 09110

(RTJ480) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2090.0000 SQ.FT. XRRP = 1167.0000 IN. X3  
 LREF = 1290.3000 INCHES YRRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZRRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1070/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
.943	800.070	-.11377	-.03478	.04421	.01054
.277	1000.500	-.12345	-.02478	.04786	.00728

RUN NO. 1068/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
200.770	800.620	-.11145	-.03430	.04230	.01525
200.540	801.800	-.12187	-.02923	.05036	.00908
200.410	998.520	-.11158	-.02849	.04829	.00658

RUN NO. 1069/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
400.070	601.310	-.10775	-.03120	.05108	.00631
399.510	798.820	-.11006	-.03026	.05075	.00646
398.280	1000.800	-.10346	-.03031	.04304	.00772

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -20.000 DBETA = 5.000  
 X = .000 PC448 = 1500.000

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -20.000 DBETA = .000  
 X = .000 PC448 = 1500.000

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,SRB(SB)WITH PLUMES SEPARATING FROM ORTIO

(RTJ480) ( 3 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1075/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
801.000	799.290	-.09852	-.03256	.03860	.00748

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -20.000 DBETA = .000  
 X = .000 PCMRB = 1500.000

1A13,SRB(SB)WITH PLUMES SEPARATING FROM ORTIO

(RTJ481) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1110/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
.885	797.900	-.11246	-.03363	.06032	.01543
.315	1001.800	-.12644	-.02165	.06534	.01143

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -20.000 DBETA = -5.000  
 X = .000 PCMRB = 1500.000

RUN NO. 1112/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
201.950	600.290	-.09474	-.03848	.05264	.02027
201.940	799.710	-.12371	-.02627	.06508	.01541
200.930	1002.400	-.12579	-.02047	.07042	.00903

RUN NO. 1113/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
400.360	598.900	-.12077	-.02396	.09206	.00737
398.190	799.400	-.11989	-.02461	.07626	.00873
398.240	1000.800	-.11012	-.02532	.06741	.00968

RUN NO. 1082/ 0 RN/L = 1.74

Y	Z	CN	CLM	CY	CYN
800.330	799.150	-.10527	-.02733	.06633	.00943

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DATE 02 AUG 75

1A13 SOURCE DATA

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1A13,SRB(S8)WITH PLUMES SEPARATING FROM 08T10

(RTJ482) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -20.000 DBETA = -10.000  
 X .000 PCMB = 1500.000

RUN NO. 1111/ 0 RN/L = 1.75

Y	Z	CN	CLM	CY	CYN
-.748	800.050	-.10862	-.02904	.08217	.01599
-.278	1001.900	-.12759	-.01569	.08124	.01234

RUN NO. 1122/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
201.790	799.500	-.11293	-.02578	.08325	.01720
201.120	1001.700	-.12168	-.01500	.08555	.01012

RUN NO. 1123/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
401.140	799.800	-.12950	-.01827	.09656	.01207
397.720	999.740	-.11120	-.01832	.08668	.00957

RUN NO. 1083/ 0 RN/L = 1.76

Y	Z	CN	CLM	CY	CYN
799.900	799.830	-.10552	-.02093	.08406	.01074

1A13,SRB(S8)WITH PLUMES SEPARATING FROM 08T10

(RTJ483) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -20.000 DBETA = -20.000  
 X .000 PCMB = 1500.000

RUN NO. 1125/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
200.790	801.260	-.10289	-.01783	.13907	.01203
200.440	1003.900	-.11548	-.00413	.13444	.00610

RUN NO. 1124/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
400.520	797.900	-.10088	-.01743	.13705	.01440
400.580	997.820	-.11830	-.00282	.14821	.00140

DATE 02 AUG 75

1A13 SOURCE DATA

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1A13.SRB(SB)WITH PLUMES SEPARATING FROM 09T10

(RTJ483) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1090/ 0 RN/L = 1.77

Y	Z	CN	CLM	CY	CYN
799.980	801.750	-.10407	-.00944	.14983	.00113

## PARAMETRIC DATA

MACH = 4.510 PTOTL = 28.900  
 ALPHA = .000 BETA = -5.000  
 DALPHA = -20.000 DBETA = -20.000  
 X = .000 PCH#8 = 1500.000

1A13 ISOLATED EXTERNAL TANK (T10)

(RTJ500) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

RUN NO. 282/ 0 RN/L = 6.59

MACH	ALPHA	CN	CLM	CY	CYN	CEL	CA
4.530	-39.994	-.85842	-.14360	-.00133	-.00029	-.00007	.11324
4.530	-29.915	-.56444	-.10946	-.00060	-.00024	-.00004	.10645
4.530	-19.846	-.31537	-.07924	-.00014	-.00014	-.00001	.09842
4.530	-14.984	-.21724	-.06239	-.00021	-.00023	.00000	.03898
4.530	-9.971	-.13149	-.04305	-.00030	-.00018	.00001	.09362
4.530	-4.990	-.05848	-.02371	-.00021	-.00019	.00002	.03120
4.530	.015	.00103	.00073	-.00043	-.00020	.00003	.08832
4.530	4.999	.06060	.02355	-.00023	-.00027	.00004	.09082
4.530	9.989	.13163	.04321	-.00088	-.00047	.00005	.09324

## PARAMETRIC DATA

MACH = 4.530 PTOTL = 110.000  
 BETA = .000

DATE 02 AUG 75

IA13 SOURCE DATA

IA13 ISOLATED EXTERNAL TANK (T10)

(RTJ501) ( 31 JUL 73 )

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1403.0000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0100

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 BETA = 5.000

RUN NO. 283/ 0 RN/L = 6.59

MACH	ALPHA	CN	CLM	CY	CYN	CSL	CA
4.530	-39.982	-65769	-14298	-11591	-01937	-00016	.11311
4.530	-29.885	-58767	-10913	-10022	-01923	-00008	.10658
4.530	-19.598	-31898	-07842	-08090	-02003	-00003	.09816
4.530	-15.002	-22016	-06182	-07434	-02000	-00001	.09549
4.530	-9.992	-13408	-04236	-06843	-01183	.00000	.09350
4.530	-4.986	-06101	-02231	-06193	-02319	.00001	.09203
4.530	.005	.00101	.00050	-05841	-02358	.00002	.09004
4.530	4.898	.06228	.02337	-06127	-02296	.00004	.09117
4.530	9.999	.13465	.04280	-06858	-02183	.00005	.09433

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 ISOLATED ORBITER (09)

(RTJ502) ( 11 JUL 75 )

## REFERENCE DATA

SRF = 2690.0000 SQ.FT. YMRP = 1789.8000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0900 IN. Y0  
 BRP = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 80.000  
 BETA = .000 ELEVTR = -40.000  
 AILRON = .000

RUN NO. 291/ 0 RM/L = 4.78

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CA
4.520	-10.684	-132948	-0.0080	-0.00422	.00030	.00089	.14213
4.520	-10.000	-132151	-0.0092	-0.00317	.00031	.00083	.14461
4.520	-9.000	-129814	-0.0126	-0.00278	.00032	.00090	.13992
4.520	-8.000	-12728	-0.0132	-0.00273	.00031	.00090	.13700
4.520	-7.000	-125518	-0.0133	-0.00259	.00015	.00082	.13378
4.520	-6.000	-123512	-0.0117	-0.00239	.00003	.00076	.13046
4.520	-5.000	-121597	-0.0059	-0.00233	-0.0001	.00072	.12671
4.520	-4.000	-119425	-0.0031	-0.00233	-0.00018	.00057	.12279
4.520	-3.000	-117208	-0.0009	-0.00217	-0.00013	.00061	.11877
4.520	-2.000	-114802	-0.0021	-0.00239	-0.00004	.00062	.11340
4.520	-1.000	-112628	-0.0020	-0.00233	-0.00003	.00060	.10947
4.520	.000	-110339	-0.0014	-0.00216	-0.00014	.00053	.10651
4.520	1.000	-107928	-0.0014	-0.00172	-0.00014	.00049	.10334
4.520	2.000	-105656	-0.0001	-0.00159	-0.00013	.00065	.10105
4.520	3.000	-103388	-0.0022	-0.00168	.00006	.00057	.09848
4.520	4.000	-101103	-0.0049	-0.00140	.00004	.00057	.09564
4.520	5.000	-101287	-0.0065	-0.00137	-0.00003	.00050	.09231
4.520	6.000	-103720	-0.0079	-0.00140	-0.00001	.00047	.08910
4.520	10.118	-13288	-0.0300	-0.00211	.00008	.00035	.08151
4.520	11.000	-15977	-0.0356	-0.00133	-0.00004	.00034	.08012
4.520	12.000	-18717	-0.0409	-0.00132	-0.00008	.00031	.07855
4.520	13.000	-21568	-0.0457	-0.00132	-0.00014	.00028	.07714
4.520	14.000	-24537	-0.0499	-0.00132	-0.00018	.00023	.07571
4.520	15.000	-27535	-0.0545	-0.00136	-0.00019	.00018	.07445
4.520	17.000	-30556	-0.0593	-0.00140	-0.00016	.00019	.07306
4.520	17.000	-33713	-0.0643	-0.00142	-0.00023	.00019	.07178
4.520	18.000	-36949	-0.0692	-0.00142	-0.00023	.00020	.07087
4.520	19.000	-40229	-0.0729	-0.00138	-0.00031	.00017	.07010
4.520	20.000	-43546	-0.0777	-0.00137	-0.00033	.00017	.06942
4.520	21.000	-47073	-0.0837	-0.00136	-0.00035	.00016	.06877
4.520	22.000	-50636	-0.0889	-0.00131	-0.00040	.00013	.06774
4.520	23.000	-54245	-0.0965	-0.00128	-0.00042	.00016	.06674
4.520	24.000	-57804	-0.1030	-0.00124	-0.00045	.00018	.06580
4.520	25.000	-61434	-0.1091	-0.00126	-0.00045	.00017	.06459
4.520	26.000	-65157	-0.1146	-0.00139	-0.00041	.00014	.06391
4.520	26.747	-67838	-0.1180	-0.00140	-0.00040	.00015	.06351

ORIGINAL PAGE IS  
 UNCLASSIFIED

## 1A13 ISOLATED ORBITER (08)

(RTJ503) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
 SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 80.000  
 BETA = .000 ELEVTR = 10.000  
 AILRON = .000

RUN NO. 293/ 0 RN/L = 4.80

MACH	ALPHA	CN	CLM	CY	CYN	CEB	CA
4.520	-10.791	-.22426	-.02200	-.00398	.00008	.00039	.10272
4.520	-10.000	-.21362	-.02195	-.00313	-.00008	.00039	.10104
4.520	-9.000	-.19618	-.02135	-.00305	-.00009	.00039	.09921
4.520	-8.000	-.17916	-.02068	-.00301	-.00011	.00039	.09747
4.520	-7.000	-.16295	-.01993	-.00289	-.00014	.00040	.09612
4.520	-6.000	-.14729	-.01909	-.00277	-.00016	.00038	.09491
4.520	-5.000	-.13060	-.01814	-.00268	-.00018	.00035	.09303
4.520	-4.000	-.11200	-.01730	-.00260	-.00019	.00032	.09094
4.520	-3.000	-.09254	-.01661	-.00255	-.00019	.00032	.08880
4.520	-2.000	-.07302	-.01608	-.00247	-.00019	.00029	.08696
4.520	-1.000	-.05304	-.01592	-.00242	-.00018	.00027	.08503
4.520	.000	-.03205	-.01519	-.00235	-.00018	.00026	.08327
4.520	1.000	-.01160	-.01482	-.00232	-.00017	.00026	.08171
4.520	2.000	.00972	-.01451	-.00231	-.00015	.00025	.08025
4.520	3.000	.03145	-.01429	-.00226	-.00016	.00025	.07890
4.520	4.000	.05378	-.01415	-.00215	-.00018	.00026	.07753
4.520	5.000	.07707	-.01403	-.00195	-.00022	.00020	.07585
4.520	5.722	.09389	-.01397	-.00194	-.00021	.00015	.07468
4.520	10.044	.19505	-.01225	-.00214	-.00027	.00015	.06399
4.520	11.000	.22729	-.01277	-.00132	-.00040	.00011	.06455
4.520	12.000	.25865	-.01350	-.00143	-.00039	.00010	.07015
4.520	13.000	.28985	-.01393	-.00141	-.00042	.00011	.07095
4.520	14.000	.31978	-.01364	-.00135	-.00045	.00009	.06558
4.520	15.000	.35052	-.01368	-.00140	-.00046	.00011	.06465
4.520	16.000	.38390	-.01419	-.00150	-.00048	.00014	.06545
4.520	17.000	.41894	-.01476	-.00155	-.00046	.00012	.06643
4.520	18.000	.45455	-.01527	-.00158	-.00048	.00015	.06570
4.520	19.000	.49107	-.01556	-.00163	-.00049	.00013	.06752
4.520	20.000	.53007	-.01685	-.00151	-.00053	.00013	.07040
4.520	21.000	.56980	-.01759	-.00151	-.00055	.00014	.07244
4.520	22.000	.60835	-.01815	-.00152	-.00056	.00017	.07285
4.520	23.000	.64821	-.01876	-.00147	-.00060	.00020	.07329
4.520	24.000	.68978	-.01944	-.00144	-.00061	.00020	.07393
4.520	25.000	.73119	-.02019	-.00155	-.00058	.00020	.07431
4.520	26.000	.77358	-.02100	-.00166	-.00055	.00021	.07497
4.520	26.624	.79840	-.02151	-.00168	-.00055	.00024	.07511

DATE 02 AUG 75

IA13 SOURCE DATA

IA13 ISOLATED ORBITER (09)

PAGE 547

(RTJ504) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XG  
LREF = 1200.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1200.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

RUN NO. 295/ 0 RV/L = 4.80

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 80.000  
BETA = .000 ELEVTR = .000  
ATLON = 10.000

MACH	ALPHA	CN	CLM	CY	CYN	CSL	CA
4.520	-10.749	-.23988	-.01803	-.00315	.00048	.00380	.10521
4.520	-10.000	-.23017	-.01816	-.00231	.00028	.00368	.10375
4.520	-9.000	-.21152	-.01775	-.00224	.00021	.00349	.10165
4.520	-8.000	-.19342	-.01726	-.00222	.00016	.00334	.09971
4.520	-7.000	-.17630	-.01659	-.00218	.00008	.00321	.09800
4.520	-6.000	-.16004	-.01598	-.00207	.00000	.00310	.09641
4.520	-5.000	-.14257	-.01506	-.00194	.00007	.00298	.09404
4.520	-4.000	-.12381	-.01422	-.00181	.00012	.00292	.09152
4.520	-3.000	-.10454	-.01352	-.00172	.00017	.00292	.08930
4.520	-2.000	-.08519	-.01293	-.00167	.00023	.00289	.08729
4.520	-1.000	-.06516	-.01252	-.00162	.00030	.00282	.08521
4.520	.000	-.04473	-.01211	-.00153	.00037	.00280	.08329
4.520	1.000	-.02374	-.01169	-.00143	.00045	.00282	.08147
4.520	2.000	-.00253	-.01132	-.00134	.00051	.00286	.07961
4.520	3.000	.01880	-.01099	-.00122	.00059	.00293	.07814
4.520	4.000	.04083	-.01071	-.00100	.00069	.00303	.07642
4.520	5.000	.06331	-.01040	-.00072	.00082	.00310	.07447
4.520	5.823	.08213	-.01017	-.00068	.00089	.00315	.07298
4.520	10.059	.17767	-.00758	-.00128	.00118	.00387	.06103
4.520	11.000	.20819	-.00766	-.00044	.00139	.00406	.06142
4.520	12.000	.23731	-.00781	-.00045	.00146	.00428	.06399
4.520	13.000	.26799	-.00810	-.00042	.00158	.00454	.06752
4.520	14.000	.29818	-.00808	-.00032	.00171	.00479	.06700
4.520	15.000	.32970	-.00811	-.00029	.00184	.00506	.06654
4.520	16.000	.36168	-.00814	-.00028	.00194	.00535	.06624
4.520	17.000	.39418	-.00809	-.00022	.00206	.00562	.06543
4.520	18.000	.42728	-.00775	-.00014	.00219	.00595	.06179
4.520	19.000	.46383	-.00803	-.00014	.00232	.00619	.06311
4.520	20.000	.50045	-.00843	-.00014	.00244	.00653	.06543
4.520	21.000	.53713	-.00857	-.00016	.00256	.00687	.06605
4.520	22.000	.57495	-.00867	-.00014	.00269	.00721	.06602
4.520	23.000	.61344	-.00982	-.00012	.00282	.00756	.06600
4.520	24.000	.65131	-.00898	-.00007	.00293	.00787	.06588
4.520	25.000	.69060	-.00928	-.00018	.00301	.00819	.06597
4.520	26.000	.73111	-.00956	-.00029	.00311	.00852	.06619
4.520	27.000	.77139	-.01005	-.00035	.00321	.00883	.06628

ORIGINAL PAGE IS  
OF POOR QUALITY



## 1A13 ISOLATED ORBITER (08)

(RTJ05) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1069.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZO  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 80.000  
BETA = .000 ELEVTR = .000  
AILRON = .000

RM NO. 297/ 0 RM/L = 4.80

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CA
4.520	-10.715	-23765	-0.0867	-0.00870	-0.00010	.00038	.10322
4.520	-10.000	-22781	-0.0883	-0.0164	-0.00025	.00039	.10129
4.520	-9.000	-20938	-0.0831	-0.0177	-0.00028	.00039	.09918
4.520	-8.000	-19195	-0.0772	-0.0171	-0.00028	.00040	.09748
4.520	-7.000	-17508	-0.0705	-0.0159	-0.00031	.00040	.09614
4.520	-6.000	-15919	-0.0622	-0.0149	-0.00033	.00037	.09476
4.520	-5.000	-14243	-0.0524	-0.0137	-0.00035	.00033	.09259
4.520	-4.000	-12437	-0.0435	-0.0129	-0.00039	.00030	.09024
4.520	-3.000	-10545	-0.0356	-0.0125	-0.00035	.00028	.08796
4.520	-2.000	-86640	-0.0280	-0.0118	-0.00036	.00027	.08584
4.520	-1.000	-66678	-0.0220	-0.0116	-0.00038	.00026	.08367
4.520	.000	-46681	-0.0163	-0.0114	-0.00035	.00024	.08168
4.520	1.000	-26635	-0.0108	-0.0105	-0.00034	.00024	.07994
4.520	2.000	-5577	-0.0055	-0.0103	-0.00032	.00023	.07816
4.520	3.000	0.1502	-0.0004	-0.0100	-0.00033	.00021	.07639
4.520	4.000	0.3628	-0.0057	-0.0088	-0.00035	.00021	.07464
4.520	5.000	0.5939	-0.00914	-0.0075	-0.00038	.00017	.07288
4.520	5.837	0.7683	-0.0081	-0.0087	-0.00037	.00014	.07110
4.520	10.119	1.7585	-0.0590	-0.0108	-0.00037	.00010	.05846
4.520	11.000	2.0123	-0.0571	-0.0118	-0.00035	.00008	.05882
4.520	12.000	2.3063	-0.0581	-0.0128	-0.00033	.00007	.06234
4.520	13.000	2.6016	-0.0581	-0.0125	-0.00036	.00007	.06423
4.520	14.000	2.8962	-0.0559	-0.0122	-0.00038	.00007	.06344
4.520	15.000	3.2010	-0.0539	-0.0124	-0.00040	.00004	.06257
4.520	16.000	3.5184	-0.0526	-0.0123	-0.00042	.00005	.06205
4.520	17.000	3.8481	-0.0516	-0.0126	-0.00044	.00006	.06184
4.520	18.000	4.1825	-0.0511	-0.0123	-0.00047	.00006	.06160
4.520	19.000	4.5274	-0.0514	-0.0124	-0.00047	.00004	.06144
4.520	20.000	4.8788	-0.0509	-0.0127	-0.00047	.00004	.06110
4.520	21.000	5.2374	-0.0497	-0.0124	-0.00049	.00004	.06068
4.520	22.000	5.6073	-0.0488	-0.0126	-0.00050	.00005	.06030
4.520	23.000	5.9989	-0.0486	-0.0119	-0.00054	.00007	.06004
4.520	24.000	6.3853	-0.0492	-0.0117	-0.00054	.00007	.05988
4.520	25.000	6.7763	-0.0508	-0.0130	-0.00051	.00008	.05959
4.520	26.000	7.1711	-0.0524	-0.0141	-0.00047	.00007	.05920
4.520	27.000	7.5621	-0.0513	-0.0138	-0.00046	.00004	.05735

DATE 02 AUG 75

1A13 SOURCE DATA

1A13 ISOLATED ORBITER (C9)

PAGE 549

(RTJ506) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 60.000  
BETA = 5.000 ELEVTR = .000  
AILRON = .000

RUN NO. 299/ 0 RN/L = 4.78

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CA
4.520	-10.764	-24687	-0.1813	-0.0055	-0.0050	.00485	.10423
4.520	-10.000	-23676	-0.1832	-0.0068	-0.0068	.00468	.10300
4.520	-9.000	-21779	-0.1792	-0.00726	-0.0087	.00446	.10083
4.520	-8.000	-19888	-0.1748	-0.00519	-0.0104	.00424	.09889
4.520	-7.000	-18094	-0.1698	-0.0033	-0.0117	.00401	.09738
4.520	-6.000	-16320	-0.1630	-0.00803	-0.0133	.00369	.09542
4.520	-5.000	-14531	-0.1550	-0.07827	-0.0153	.00324	.09310
4.520	-4.000	-12656	-0.1472	-0.07570	-0.0171	.00273	.09063
4.520	-3.000	-10700	-0.1407	-0.07327	-0.0181	.00227	.08849
4.520	-2.000	-88718	-0.1350	-0.07092	-0.0189	.00189	.08651
4.520	-1.000	-66717	-0.1296	-0.06850	-0.0198	.00153	.08451
4.520	.000	-44712	-0.1243	-0.06636	-0.0212	.00117	.08257
4.520	1.000	-2631	-0.1182	-0.06425	-0.0227	.00083	.08052
4.520	2.000	-70524	-0.1145	-0.06239	-0.0240	.00049	.07840
4.520	3.000	1618	-0.1108	-0.06075	-0.0256	.00017	.07646
4.520	4.000	33783	-0.1064	-0.05924	-0.0267	.00016	.07465
4.520	5.000	6011	-0.1020	-0.05746	-0.0283	.00045	.07300
4.520	5.906	88073	-0.0999	-0.05608	-0.0292	.00072	.07124
4.520	10.062	17061	-0.0930	-0.0547	-0.0371	.00206	.06832
4.520	11.000	20018	-0.0812	-0.0537	-0.0383	.00243	.05860
4.520	12.000	22810	-0.0576	-0.05490	-0.0386	.00282	.05863
4.520	13.000	25767	-0.0562	-0.05446	-0.0399	.00309	.05922
4.520	14.000	28871	-0.0575	-0.05383	-0.0419	.00324	.06047
4.520	15.000	31968	-0.00575	-0.05312	-0.0440	.00344	.06109
4.520	16.000	35138	-0.00560	-0.05240	-0.0460	.00369	.06125
4.520	17.000	38430	-0.00546	-0.05162	-0.0482	.00396	.06104
4.520	18.000	41765	-0.00539	-0.05079	-0.0503	.00419	.06071
4.520	19.000	45206	-0.00535	-0.05008	-0.0524	.00438	.06067
4.520	20.000	48753	-0.00532	-0.04922	-0.0547	.00456	.06057
4.520	21.000	52408	-0.00535	-0.04837	-0.0569	.00472	.06042
4.520	22.000	56240	-0.00544	-0.04749	-0.0590	.00486	.06029
4.520	23.000	60118	-0.00558	-0.04648	-0.0610	.00500	.06020
4.520	24.000	63975	-0.00577	-0.04556	-0.0625	.00511	.06007
4.520	25.000	67902	-0.00602	-0.04478	-0.0631	.00524	.05984
4.520	26.000	71923	-0.00627	-0.04403	-0.0633	.00541	.05972
4.520	27.000	75769	-0.00660	-0.04324	-0.0635	.00552	.05962

## IA13 ISOLATED ORBITER (09)

(RTJ507) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z0  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 80.000  
BETA = 10.000 ELEVTR = .000  
AILRON = .000

RUN NO. 3017 0 RN/L = 4.80

MACH	ALPHA	CN	CLM	CY	CYN	CFL	CA
4.520	-10.605	-27040	-0.1685	-1.1832	-0.0028	.0693	.10878
4.520	-10.000	-25281	-0.1678	-1.18022	-0.0066	.00674	.10592
4.520	-9.000	-23168	-0.1664	-1.17582	-0.0117	.00648	.10468
4.520	-8.000	-21118	-0.1643	-1.17144	-0.0144	.00619	.10258
4.520	-7.000	-19136	-0.1619	-1.16721	-0.0176	.00586	.10059
4.520	-6.000	-17191	-0.1587	-1.16273	-0.0208	.0054	.09839
4.520	-5.000	-15218	-0.1548	-1.15801	-0.0242	.00479	.09596
4.520	-4.000	-13180	-0.1504	-1.15339	-0.0278	.00407	.09341
4.520	-3.000	-11120	-0.1460	-1.14900	-0.0305	.00338	.09093
4.520	-2.000	-9078	-0.1419	-1.14472	-0.0330	.00269	.08867
4.520	-1.000	-7005	-0.1381	-1.14063	-0.0353	.00204	.08542
4.520	.000	-4873	-0.1351	-1.13672	-0.0382	.00149	.08418
4.520	1.000	-2681	-0.1316	-1.13320	-0.0410	.00095	.08205
4.520	2.000	-4078	-0.1275	-1.12980	-0.0437	.00043	.08005
4.520	3.000	-1734	-0.1229	-1.12574	-0.0456	-.00011	.07824
4.520	4.000	-3970	-0.1185	-1.12386	-0.0469	-.00064	.07625
4.520	5.000	-86279	-0.1145	-1.12101	-0.0484	-.00116	.07431
4.520	6.000	-8578	-0.1098	-1.11810	-0.0508	-.00167	.07263
4.520	10.112	-17750	-0.0774	-1.11712	-0.0587	-.00362	.06534
4.520	11.000	-20586	-0.0739	-1.11538	-0.0725	-.00414	.06414
4.520	12.000	-23430	-0.0703	-1.11432	-0.0774	-.00476	.06426
4.520	13.000	-26317	-0.0671	-1.11297	-0.0770	-.00530	.06450
4.520	14.000	-29202	-0.0628	-1.11113	-0.0814	-.00585	.06396
4.520	15.000	-32111	-0.0580	-1.10997	-0.0862	-.00644	.06326
4.520	16.000	-35194	-0.0560	-1.10717	-0.0902	-.00688	.06286
4.520	17.000	-38417	-0.0543	-1.10540	-0.0941	-.00731	.06215
4.520	18.000	-41820	-0.0538	-1.10397	-0.0978	-.00772	.06172
4.520	19.000	-45337	-0.0542	-1.10259	-0.1014	-.00813	.06157
4.520	20.000	-48916	-0.0553	-1.10108	-0.1049	-.00851	.06162
4.520	21.000	-52558	-0.0568	-1.09963	-0.1081	-.00885	.06177
4.520	22.000	-56328	-0.0584	-1.09805	-0.1110	-.00921	.06182
4.520	23.000	-60212	-0.0602	-1.09652	-0.1139	-.00960	.06188
4.520	24.000	-63989	-0.0621	-1.09478	-0.1160	-.00998	.06179
4.520	25.000	-67939	-0.0640	-1.09322	-0.1184	-.01039	.06178
4.520	26.000	-72090	-0.0671	-1.09188	-0.1201	-.01078	.06193
4.520	27.000	-75877	-0.0705	-1.09020	-0.1208	-.01112	.06171
4.520	27.257	-76993	-0.0714	-1.08982	-0.1238	-.01119	.06170

DATE 02 AUG 75

IA13 SOURCE DATA

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IA13 ISOLATED ORBITER WITH EXTERNAL TANK(09T10)

(RTJ508) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2680.0000 50.FT. XMRP = 1052.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

R/JN NO. 1135/ 0 RN/L = 1.78

## PARAMETRIC DATA

MACH	ALPHA	CN	CLM	CY	CYN	CEL	CA
4.510	-10.000	-.30142	.10149	.00456	-.00310	.00075	.22442
4.510	-9.000	-.27784	.09613	.00463	-.00317	.00080	.21997
4.510	-8.000	-.25430	.09048	.00432	-.00337	.00091	.21471
4.510	-7.000	-.22867	.08338	.00476	-.00329	.00092	.20896
4.510	-6.000	-.20170	.07511	.00478	-.00323	.00093	.20331
4.510	-5.000	-.17522	.06655	.00448	-.00298	.00085	.19789
4.510	-4.000	-.14847	.05777	.00417	-.00264	.00075	.19159
4.510	-3.000	-.12201	.04935	.00402	-.00248	.00070	.18575
4.510	-2.000	-.09733	.04232	.00413	-.00251	.00073	.18112
4.510	-1.000	-.07398	.03605	.00395	-.00236	.00070	.17665
4.510	.000	-.05109	.03007	.00395	-.00231	.00073	.17264
4.510	1.000	-.02824	.02398	.00415	-.00248	.00081	.16895
4.510	2.000	-.00558	.01791	.00402	-.00239	.00084	.16552
4.510	3.000	.01666	.01184	.00405	-.00245	.00085	.16285
4.510	4.000	.03908	.00564	.00397	-.00230	.00084	.16077
4.510	5.000	.06295	-.00108	.00403	-.00233	.00089	.15909
4.510	11.000	.20491	-.04351	.00296	-.00181	.00081	.14839
4.510	12.000	.23913	-.04984	.00269	-.00175	.00083	.14605
4.510	13.000	.25404	-.05676	.00302	-.00171	.00084	.14367
4.510	14.000	.27987	-.06453	.00310	-.00167	.00082	.14161
4.510	15.000	.30549	-.07213	.00310	-.00167	.00084	.13984
4.510	16.000	.33178	-.07990	.00349	-.00165	.00083	.13794
4.510	17.000	.35959	-.08812	.00328	-.00165	.00081	.13631
4.510	18.000	.38575	-.09539	.00352	-.00169	.00080	.13479
4.510	19.000	.41327	-.10238	.00381	-.00169	.00067	.13343
4.510	20.000	.44106	-.10971	.00399	-.00170	.00055	.13237
4.510	21.000	.46972	-.11713	.00392	-.00161	.00060	.13149
4.510	22.000	.49990	-.12598	.00395	-.00159	.00077	.13051
4.510	23.000	.53593	-.13536	.00402	-.00182	.00097	.12992
4.510	24.000	.57488	-.14526	.00544	-.00233	.00122	.12797
4.510	25.000	.61415	-.17188	.00592	-.00177	.00122	.12411
4.510	26.000	.65393	-.18895	.00425	-.00160	.00100	.12308

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OF LOWER QUALITY

## IA13 ISOLATED ORBITER WITH EXTERNAL TANK(OBT:0)

(RT:008) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1092.0000 IN. XT  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
BREF = 1290.3000 INCHES ZMRP = 447.0000 IN. ZT  
SCALE = .0100

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
BETA = 5.000 ELEVTR = .000  
AILRON = .000

RUN NO. 1134/ 0 RN/L = 1.75

MACH	ALPHA	CN	CLN	CY	CYN	CBL	CA
4.510	-10.000	-30794	.10198	-.16843	.05435	-.01697	.22930
4.510	-9.000	-28471	.09727	-.16654	.05351	-.01644	.22528
4.510	-8.000	-26088	.09175	-.16423	.05248	-.01625	.22023
4.510	-7.000	-23490	.08471	-.16122	.05104	-.01622	.21417
4.510	-6.000	-20804	.07671	-.15812	.04950	-.01627	.20865
4.510	-5.000	-18117	.06823	-.15463	.04777	-.01632	.20356
4.510	-4.000	-15449	.05928	-.15159	.04633	-.01624	.19813
4.510	-3.000	-12823	.05191	-.14843	.04484	-.01606	.19252
4.510	-2.000	-10288	.04456	-.14540	.04341	-.01588	.18757
4.510	-1.000	-.07828	.03758	-.14181	.04165	-.01563	.18221
4.510	.000	-.05425	.03067	-.13834	.03977	-.01543	.17655
4.510	1.000	-.02997	.02361	-.13477	.03804	-.01519	.17398
4.510	2.000	-.00588	.01655	-.13169	.03635	-.01483	.17055
4.510	3.000	.01858	.00892	-.12852	.03455	-.01432	.16716
4.510	4.000	.04231	.00171	-.12604	.03309	-.01397	.16455
4.510	5.000	.05768	-.00593	-.12357	.03189	-.01378	.16197
4.510	11.000	.21162	-.04563	-.11818	.02628	-.01487	.14851
4.510	12.000	.23677	-.05281	-.11696	.02539	-.01510	.14627
4.510	13.000	.26184	-.06014	-.11619	.02475	-.01528	.14385
4.510	14.000	.28781	-.06827	-.11581	.02446	-.01534	.14128
4.510	15.000	.31486	-.07668	-.11580	.02405	-.01531	.13934
4.510	16.000	.34201	-.08496	-.11577	.02351	-.01515	.13768
4.510	17.000	.37142	-.09411	-.11578	.02278	-.01491	.13654
4.510	18.000	.40152	-.10349	-.11536	.02174	-.01471	.13540
4.510	19.000	.43157	-.11244	-.11459	.02032	-.01457	.13433
4.510	20.000	.46262	-.12196	-.11408	.01919	-.01450	.13324
4.510	21.000	.49514	-.13228	-.11397	.01854	-.01493	.13181
4.510	22.000	.52954	-.14374	-.11333	.01774	-.01539	.12989
4.510	23.000	.56594	-.15674	-.11352	.01757	-.01543	.12838
4.510	24.000	.60307	-.16997	-.11481	.01842	-.01625	.12695
4.510	25.000	.64221	-.18451	-.11724	.02045	-.01697	.12545
4.510	26.000	.68143	-.19968	-.11869	.02188	-.01738	.12465

DATE 02 AUG 75 1A13 SOURCE DATA

1A13 ISOLATED SOLID ROCKET BOOSTER(SB)/OPLINES (RTJ510) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 753/ 0 RN/L = 6.62

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
BETA = -10.000 PCHGR = .000

MACH	ALPHA	CN	CLM	CY	CYN
4.530	-29.978	-.28536	-.00820	.09165	.00333
4.530	-24.949	-.20630	-.00474	.03463	.00271
4.530	-19.968	-.15149	-.00451	.07723	.00238
4.530	-14.978	-.10296	-.00473	.07036	.00264
4.530	-9.990	-.05215	-.00476	.06379	.00331
4.530	-4.993	-.02801	-.00342	.05904	.00407
4.530	.007	-.00071	-.00071	.05659	.00435
4.530	5.005	.02716	.00159	.05806	.00398
4.530	10.001	.06080	.00311	.06389	.00322
4.530	14.988	.10262	.00275	.07162	.00169

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 763/ 0 RN/L = 6.62

1A13 ISOLATED SOLID ROCKET BOOSTER(SB)/OPLINES (RTJ511) ( 31 JUL 75 )

PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
BETA = .000 PCHGR = .000

MACH	ALPHA	CN	CLM	CY	CYN
4.530	-29.983	-.28698	-.00390	-.00468	.00253
4.530	-24.952	-.20537	-.00320	-.00365	.00204
4.530	-19.961	-.14887	-.00347	-.00260	.00149
4.530	-14.985	-.09775	-.00481	-.00170	.00100
4.530	-9.988	-.05625	-.00521	-.00160	.00073
4.530	-4.996	-.02165	-.00444	-.00062	.00029
4.530	.002	-.00090	-.00068	-.00013	.00024
4.530	5.005	.01935	.00321	-.00011	.00016
4.530	9.999	.05301	.00463	-.00008	.00025
4.530	14.993	.09538	.00427	.00055	.00001

DATE 02 AUG 75

IA13 SOURCE DATA

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(RTJ512) ( 31 JUL 75 )

IA13 ISOLATED SOLID ROCKET BOOSTER(SB)W/OPLUNES

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 773/ 0 RN/L = 6.63

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 BETA = 5.000 PCHBR = .000

MACH	ALPHA	CN	CLM	CY	CYN
4.530	-29.984	-.26934	-.00299	-.05140	.00196
4.530	-24.955	-.20836	-.00228	-.04652	.00145
4.530	-19.958	-.15211	-.00247	-.04083	.00084
4.530	-14.982	-.10134	-.00366	-.03528	-.00036
4.530	-9.988	-.05948	-.00427	-.03033	-.00149
4.530	-4.995	-.02499	-.00355	-.02481	-.00282
4.530	.004	-.00114	-.00046	-.02048	-.00366
4.530	5.006	.02274	-.00246	-.02276	-.00346
4.530	9.998	.05593	.00388	-.02813	-.00221
4.530	14.997	.09818	.00369	-.03258	-.00151

IA13 ISOLATED SOLID ROCKET BOOSTER(SB)W/OPLUNES

(RTJ513) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 783/ 0 RN/L = 6.63

## PARAMETRIC DATA

MACH = 4.530 PTOTAL = 110.000  
 BETA = 10.000 PCHBR = .000

MACH	ALPHA	CN	CLM	CY	CYN
4.530	-29.981	-.27390	-.00201	-.09953	.00139
4.530	-24.953	-.21333	-.00122	-.09078	.00091
4.530	-19.972	-.15802	-.00133	-.08152	.00027
4.530	-14.983	-.10806	-.00203	-.07241	-.00109
4.530	-9.988	-.06544	-.00278	-.06402	-.00275
4.530	-4.990	-.03002	-.00238	-.05787	-.00418
4.530	.007	-.00116	-.00044	-.05431	-.00481
4.530	5.003	.02742	.00146	-.03606	-.00434
4.530	10.003	.06074	.00293	-.06234	-.00358
4.530	14.999	.10300	.00262	-.07070	-.00201

DATE 02 AUG 75 1A13 SOURCE DATA

1A13 ISOLATED SOLID ROCKET BOOSTER(SB)/OPL/UKES

(RTJ514) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 793/ 0 RN/L = 8.82

PARAMETRIC DATA

MACH = 4.530 PTOTAL 110.000  
BETA = 20.000 PCHGR = .000

MACH	ALPHA	CN	CLM	CY	CYN
4.530	-29.984	-.28230	-.00100	-.20326	-.00048
4.530	-24.953	-.22557	.00034	-.19065	-.00032
4.530	-19.965	-.17166	.00028	-.17740	-.00058
4.530	-14.977	-.12244	.00002	-.16612	-.00120
4.530	-9.985	-.07924	-.00007	-.15713	-.00183
4.530	-4.995	-.03948	-.00028	-.15149	-.00272
4.530	.007	-.00289	.00022	-.14809	-.00305
4.530	5.002	.03455	.00015	-.14953	-.00284
4.530	9.999	.07444	.00081	-.15592	-.00275
4.530	14.985	.11803	.00117	-.16431	-.00211

1A13 ISOLATED SOLID ROCKET BOOSTER(SB)/OPL/UKES

(RTJ515) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 803/ 0 RN/L = 3.55

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 58.000  
BETA = -10.000 PCHGR = .000

MACH	ALPHA	CN	CLM	CY	CYN
4.520	-29.990	-.28503	-.00687	.09095	.00365
4.520	-24.984	-.20657	-.00531	.08476	.00295
4.520	-19.984	-.15210	-.00489	.07721	.00244
4.520	-14.988	-.10300	-.00522	.06998	.00277
4.520	-9.993	-.08113	-.00528	.06353	.00334
4.520	-5.065	-.02765	-.00395	.05821	.00417
4.520	-.062	-.00090	-.00128	.05544	.00447
4.520	5.001	.02674	.00106	.05765	.00404
4.520	9.933	.09977	.00241	.06320	.00319
4.520	15.000	.10181	.00253	.07176	.00200

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DATE 02 AUG 75

1A13 SOURCE DATA

(RTJ518) ( 31 JUL 75 )

1A13 ISOLATED SOLID ROCKET BOOSTER(SB)W/OPLINES

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 813/ 0 RN/L = 3.52

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 58.000  
BETA = .000 PCHEER = .000

MACH	ALPHA	CN	CLM	CY	CYN
4.520	-29.981	-26575	-1.00489	-.00487	.00253
4.520	-24.984	-20545	-.00394	-.00389	.00200
4.520	-18.988	-14882	-.00477	-.00301	.00157
4.520	-14.992	-.09739	-.00527	-.00287	.00124
4.520	-9.997	-.05558	-.00569	-.00178	.00091
4.520	-5.059	-.02211	-.00458	-.00079	.00037
4.520	-.053	-.00207	-.00057	-.00059	-.00010
4.520	5.059	.02077	.00195	-.00039	.00037
4.520	9.923	.05238	.00388	.00010	.00030
4.520	14.999	.09486	.00370	.00168	-.00001

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 823/ 0 RN/L = 3.49

(RTJ517) ( 31 JUL 75 )

1A13 ISOLATED SOLID ROCKET BOOSTER(SB)W/OPLINES

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 58.000  
BETA = 5.000 PCHEER = .000

MACH	ALPHA	CN	CLM	CY	CYN
4.520	-29.987	-26897	-.00395	-.05113	.00186
4.520	-24.988	-20828	-.00311	-.04813	.0135
4.520	-18.990	-15187	-.00314	-.04084	.00074
4.520	-14.989	-10085	-.00428	-.03500	-.00031
4.520	-9.996	-.01884	-.00480	-.02958	-.00130
4.520	-5.058	-.02510	-.00385	-.02453	-.00234
4.520	-.062	-.00125	-.00109	-.02147	-.00273
4.520	5.054	.02520	.00189	-.02529	-.00090
4.520	9.922	.05510	.00317	-.02833	-.00184
4.520	15.034	.09778	.00316	-.03162	-.00144

DATE 02 AUG 75

1A13 SOURCE DATA

1A13 ISOLATED SOLID ROCKET BOOSTER(SB)H/OPLUMES

(RTJ518) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 833/ 0 RN/L = 3.46

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 58.000  
 BETA = 10.000 PCHEER = .000

MACH	ALPHA	CN	CLM	CY	CYN
4.520	-29.989	-27273	-.00287	-.09876	-.00113
4.520	-24.984	-21285	-.00214	-.09012	.00055
4.520	-18.985	-15738	-.00215	-.08144	.00005
4.520	-14.539	-10728	-.00281	-.07219	-.00114
4.520	-9.994	-.06482	-.00329	-.06379	-.00264
4.520	-5.054	-.02873	-.00294	-.05731	-.00382
4.520	-.080	-.00144	-.00101	-.05384	-.00443
4.520	5.004	.02692	.00111	-.05589	-.00424
4.520	9.922	.05997	.00240	-.05259	-.00315
4.520	15.002	.10249	.00251	-.07072	-.00200

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 843/ 0 RN/L = 3.46

1A13 ISOLATED SOLID ROCKET BOOSTER(SB)H/OPLUMES

(RTJ519) ( 31 JUL 75 )

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 58.000  
 BETA = 20.000 PCHEER = .000

MACH	ALPHA	CN	CLM	CY	CYN
4.520	-29.994	-.28021	-.00202	-.20209	-.00083
4.520	-24.985	-.22393	-.00068	-.18932	-.00074
4.520	-19.987	-.17060	-.00073	-.17624	-.00101
4.520	-14.978	-.12201	-.00097	-.16532	-.00145
4.520	-9.994	-.07823	-.00100	-.15598	-.00201
4.520	-5.057	-.03925	-.00104	-.14992	-.00288
4.520	-.068	-.00718	-.00049	-.14654	-.00312
4.520	4.998	.03465	-.00034	-.14885	-.00290
4.520	9.918	.07372	.00049	-.15447	-.00281
4.520	15.000	.11750	.00059	-.16347	-.00226

DATE 02 AUG 75

IA13 SOURCE DATA

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(RTJ520) ( 31 JUL 75 )

IA13 ISOLATED SOLID ROCKET BOOSTER(SB)/OPLUMES

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 946/ 0 RN/L = 1.78

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.054	-.28394	-.00378	.08885	.00205
4.510	-24.970	-.20535	-.00183	.08115	.00078
4.510	-19.994	-.14993	-.00079	.07447	.00020
4.510	-14.906	-.09936	-.00266	.06800	.00085
4.510	-10.067	-.05729	-.00386	.06376	.00186
4.510	-5.028	-.02526	-.00279	.05771	.00288
4.510	-.029	.00102	-.00016	.05632	.00296
4.510	5.038	.02805	.00295	.05913	.00315
4.510	9.964	.05638	.00444	.06584	.00144
4.510	15.002	.09342	.00443	.07226	.00256

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
BETA = -10.000 PCMPBR = .000

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 952/ 0 RN/L = 1.78

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.052	-.28884	-.00183	-.00738	.00134
4.510	-24.987	-.20708	-.00082	-.00576	.00075
4.510	-19.995	-.14825	-.00112	-.00452	-.00013
4.510	-14.997	-.09609	-.00369	-.00449	.00022
4.510	-10.063	-.05503	-.00434	-.00485	.00074
4.510	-5.025	-.02307	-.00300	-.00269	.00041
4.510	-.023	.00259	.00043	.00021	-.00057
4.510	5.032	.01827	.00377	.00035	-.00041
4.510	9.959	.04897	.00542	-.00005	-.00094
4.510	15.094	.09117	.00534	.00122	-.00128

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
BETA = .000 PCMPBR = .000

(RTJ521) ( 31 JUL 75 )

DATE 02 AUG 75

IA13 SOURCE DATA

IA13 ISOLATED SOLID ROCKET BOOSTER(SB)W/OPLUMES

(RTJ522) ( 31 JUL 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 958/ 0 RN/L = 1.75

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
BETA = 5.000 PCMR = .000

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.052	-27260	-50133	-03349	.00067
4.510	-24.990	-21091	-00034	-04795	.00015
4.510	-19.993	-15231	-00078	-04143	-00082
4.510	-14.999	-10125	-00271	-03535	-00178
4.510	-10.061	-05934	-00315	-03194	-00215
4.510	-5.027	-02555	-00220	-02670	-00294
4.510	-.025	-00212	-00034	-02108	-00370
4.510	5.034	02016	00338	-02184	-00350
4.510	9.964	05206	00464	-02653	-00279
4.510	14.999	09326	00528	-03148	-00216

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 959/ 0 RN/L = 1.76

IA13 ISOLATED SOLID ROCKET BOOSTER(SB)W/OPLUMES

(RTJ523) ( 31 JUL 75 )

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
BETA = 10.000 PCMR = .000

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.051	-27840	-00123	-10080	-00048
4.510	-24.985	-21686	-00072	-09159	-00113
4.510	-19.997	-15975	-00073	-08164	-00184
4.510	-14.995	-10938	-00184	-07190	-00300
4.510	-10.067	-06759	-00187	-06455	-00425
4.510	-5.037	-03216	-00126	-05745	-00506
4.510	-.032	-00474	-00094	-05360	-00500
4.510	5.037	02417	00312	-05444	-00463
4.510	9.965	05725	00428	-06065	-00332
4.510	15.000	09919	00457	-06860	-00315

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DATE 02 AUG 75

IA13 SOURCE DATA

(RTJ25) ( 31 JUL 75 )

IA13 ISOLATED SOLID ROCKET BOOSTER(SB)W/OPLINES

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
BETA = 20.000 PCHGR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 970/ 0 RN/L = 1.75

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.052	-27749	.00008	-.20811	-.00282
4.510	-24.988	-.22024	.00104	-.19595	-.00280
4.510	-19.992	-.16647	.00128	-.18319	-.00293
4.510	-14.995	-.11826	.00098	-.17062	-.00317
4.510	-10.042	-.08294	.01233	-.07749	-.00972
4.510	-5.041	-.04237	.00050	-.14895	-.00385
4.510	-.038	-.00524	.00168	-.14614	-.00395
4.510	9.009	.03258	.00234	-.14920	-.00371
4.510	9.955	.07165	.00279	-.15417	-.00359
4.510	15.001	.11462	.00332	-.16339	-.00347

IA13 ISOLATED SOLID ROCKET BOOSTER(SB)W/OPLINES

(RTJ25) ( 31 JUL 75 )

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
BETA = 20.000 PCHGR = .000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 977/ 0 RN/L = 1.75

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.050	-.28878	-.00150	-.20350	-.00251
4.510	-24.990	-.23238	-.00081	-.19065	-.00281
4.510	-19.993	-.17834	-.00018	-.17751	-.00288
4.510	-14.994	-.12958	-.00002	-.16631	-.00280
4.510	-9.999	-.08362	.00028	-.15661	-.00315

DATE 02 AUG 75

IA13 SOURCE DATA

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## IA13 ISOLATED SOLID ROCKET BOOSTER(SB)H/PLUMES

(RTJ287) (31 JUL 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 981/ 0 RN/L = 1.75

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 BETA = -10.000 PCHMR = 750.000

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.017	-.15794	-.01779	.05930	.00700
4.510	-24.992	-.12341	-.02124	.05700	.00775
4.510	-19.989	-.09305	-.02178	.05155	.00933
4.510	-14.888	-.06722	-.02195	.04587	.01234
4.510	-9.999	-.05114	-.01894	.04858	.01225
4.510	-5.039	-.03778	-.01196	.05937	.00904
4.510	-.035	-.01832	-.00658	.06194	.01108
4.510	5.000	.00488	-.00203	.06961	.01166
4.510	9.934	.03728	.00088	.08123	.01042
4.510	14.997	.08097	.00185	.09401	.00671

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1187.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 987/ 0 RN/L = 1.75

## IA13 ISOLATED SOLID ROCKET BOOSTER(SB)H/PLUMES

(RTJ288) (31 JUL 75)

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 BETA = .000 PCHMR = 750.000

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.018	-.15931	-.01810	-.01035	.00144
4.510	-24.996	-.12764	-.02030	-.01091	.00233
4.510	-19.993	-.10129	-.02088	-.00961	.00538
4.510	-14.997	-.08152	-.01863	-.00265	.00627
4.510	-9.999	-.06182	-.01501	.00709	.00409
4.510	-5.042	-.03650	-.01268	.00995	.00219
4.510	-.058	-.01275	-.00550	.00728	.00206
4.510	5.002	.01901	.00389	.00507	-.00072
4.510	9.969	.04904	.00243	.00803	-.00084
4.510	14.997	.08607	.00133	.01173	.00029

DATE 02 JUL 75

1A13 SOURCE DATA

(RTJ529) (31 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XREF = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YREF = .0000 IN. YS  
BREF = 1290.3000 INCHES ZREF = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 983/ 0 RN/L = 1.75

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.016	-1.9887	-0.01240	-0.05943	.00369
4.510	-24.992	-1.15489	-0.01682	-0.04973	.00322
4.510	-19.993	-1.12637	-0.01413	-0.03787	.00262
4.510	-14.998	-0.9764	-0.01327	-0.02759	.00097
4.510	-10.000	-0.6977	-0.01349	-0.01608	-.00159
4.510	-5.044	-0.4368	-0.01131	-0.01268	-.00357
4.510	-.054	-0.1400	-0.00564	-0.01787	-.00225
4.510	4.995	.01655	.00165	-.02110	-.00196
4.510	9.973	.04918	.00125	-.02336	-.00162
4.510	14.998	.08231	.00035	-.02234	-.00053

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
BETA = 5.000 PCHEER = 750.000

1A13 ISOLATED SOLID ROCKET BOOSTER(18)H/PLUMES

(RTJ530) (31 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XREF = 1187.0000 IN. XS  
LREF = 1290.3000 INCHES YREF = .0000 IN. YS  
BREF = 1290.3000 INCHES ZREF = 400.0000 IN. ZS  
SCALE = .0100

RUN NO. 989/ 0 RN/L = 1.74

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.023	-1.26851	.00594	-1.0030	.00553
4.510	-24.991	-1.21268	-.00009	-.08609	.00412
4.510	-19.995	-1.15894	-.00584	-.07095	.00129
4.510	-14.993	-1.11338	-.01126	-.05763	-.00226
4.510	-9.995	-.08118	-.01265	-.04901	-.00524
4.510	-5.048	-.05285	-.01105	-.04538	-.00506
4.510	-.055	-.02039	-.00822	-.04989	-.00448
4.510	4.997	.01700	.00122	-.05705	-.00297
4.510	9.983	.04944	.00022	-.05790	-.00131
4.510	15.000	.08707	.00001	-.05785	-.00082

PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
BETA = 10.000 PCHEER = 750.000

DATE 02 AUG 75

IA13 SOURCE DATA

IA13 ISOLATED SOLID ROCKET BOOSTER(SB)W/PLUMES

(RTJ531) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1005/ 0 RN/L = 1.76

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 BETA = 20.000 PCHGR = 750.000

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.045	-.32358	.01827	-.19275	.00479
4.510	-.24.994	-.26626	.01278	-.17687	.00344
4.510	-19.932	-.20328	.00227	-.15999	.00049
4.510	-14.597	-.15383	-.00453	-.14882	-.00320
4.510	-9.993	-.11292	-.00757	-.14052	-.00597
4.510	-5.052	-.07393	-.00823	-.14030	-.00819
4.510	-.045	-.03358	-.00311	-.14343	-.00553
4.510	5.000	.00896	-.00131	-.14783	-.00266
4.510	9.950	.05427	.00023	-.15389	-.00149
4.510	14.991	.10218	.00038	-.15903	-.00302

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XPRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1011/ 0 RN/L = 1.77

IA13 ISOLATED SOLID ROCKET BOOSTER(SB)W/PLUMES

(RTJ532) ( 31 JUL 75 )

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 BETA = -10.000 PCHGR = 1500.000

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-29.945	-.11679	-.00782	.04446	.00224
4.510	-25.038	-.11717	-.02338	.05740	.00882
4.510	-19.997	-.09580	-.02759	.06003	.01175
4.510	-14.858	-.07880	-.02720	.05594	.01478
4.510	-9.999	-.05600	-.02532	.05851	.01388
4.510	-5.043	-.04129	-.01902	.06760	.01027
4.510	-.038	-.02157	-.01238	.07371	.01254
4.510	5.004	-.00008	-.00639	.07807	.01458
4.510	9.924	.02693	-.00139	.08684	.01411
4.510	15.001	.06298	-.00014	.10345	.01270



DATE 02 AUG 75

IA13 SOURCE DATA

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(RTJ533) ( 31 JUL 75 )

IA13 ISOLATED SOLID ROCKET BOOSTER(SB)W/PLUMES

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XPRP = 1107.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1017/ 0 RN/L = 1.77

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 BETA = .000 PCHGR = 1500.000

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.008	-.14304	-.02817	.00825	.00378
4.510	-24.992	-.11681	-.03101	.00413	.00304
4.510	-19.978	-.10087	-.02991	.00198	.00898
4.510	-14.992	-.08574	-.02502	.00741	.00884
4.510	-9.993	-.06614	-.02214	.01241	.00781
4.510	-5.048	-.04247	-.02032	.01722	.00486
4.510	-.040	-.01743	-.01351	.01488	.00474
4.510	4.998	.01019	-.00871	.01395	.00495
4.510	9.972	.04322	-.00072	.01487	.00221
4.510	14.997	.07597	-.00045	.02078	.00193

IA13 ISOLATED SOLID ROCKET BOOSTER(SB)W/PLUMES

(RTJ534) ( 31 JUL 75 )

## REFERENCE DATA

SREF = 2000.0000 SQ.FT. XPRP = 1107.0000 IN. XS  
 LREF = 1290.3000 INCHES YPRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZPRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1023/ 0 RN/L = 1.77

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 BETA = 5.000 PCHGR = 1500.000

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.003	-.18031	-.02599	-.02756	.00244
4.510	-24.990	-.13916	-.02808	-.02825	.00426
4.510	-19.981	-.12081	-.02381	-.02488	.00548
4.510	-14.995	-.10220	-.02027	-.01541	.00384
4.510	-9.993	-.07849	-.01874	-.01442	.00243
4.510	-5.047	-.05319	-.01838	-.00820	-.00223
4.510	-.054	-.02349	-.01329	-.01087	-.00077
4.510	5.010	.00921	-.00701	-.01507	.00044
4.510	9.970	.04245	-.00107	-.01591	-.00094
4.510	14.997	.07748	-.00232	-.01468	-.00038

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IA13 SOURCE DATA

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(RTJ535) ( 31 JUL 75 )

IA13 ISOLATED SOLID ROCKET BOOSTER(SB)H/PLUMES

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1029/ 0 RN/L = 1.76

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 BETA = 10.000 PCHPER = 1500.000

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.021	-.21457	-.01950	-.07704	.00504
4.510	-24.986	-.16937	-.01471	-.07336	.00608
4.510	-19.990	-.16071	-.01509	-.06143	.00449
4.510	-14.999	-.12381	-.01535	-.05045	.00102
4.510	-9.999	-.08768	-.01773	-.04179	-.00288
4.510	-5.041	-.06060	-.01744	-.03808	-.00498
4.510	-.075	-.03115	-.01373	-.03862	-.00434
4.510	5.017	.01056	-.00382	-.04827	-.00410
4.510	9.971	.04107	-.00199	-.05081	-.00115
4.510	14.995	.07352	-.00273	-.05273	.00163

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1167.0000 IN. XS  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YS  
 BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZS  
 SCALE = .0100

RUN NO. 1035/ 0 RN/L = 1.76

## PARAMETRIC DATA

MACH = 4.510 PTOTAL = 28.900  
 BETA = 20.000 PCHPER = 1500.000

MACH	ALPHA	CN	CLM	CY	CYN
4.510	-30.020	-.31709	.01601	-.18607	.01495
4.510	-24.987	-.25388	.00780	-.16112	.00847
4.510	-19.994	-.19784	-.00102	-.14150	.00171
4.510	-14.998	-.15484	-.00807	-.12861	-.00352
4.510	-9.936	-.11907	-.01172	-.12253	-.00657
4.510	-5.034	-.08416	-.01340	-.12218	-.00787
4.510	-.067	-.05376	-.01235	-.12683	-.00660
4.510	5.009	-.00915	-.00556	-.13558	-.00323
4.510	9.953	.03627	-.00288	-.14743	-.00138
4.510	15.001	.03395	-.00250	-.15773	-.00129

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